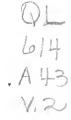
AMERICAN FISHERIES SOCIETY

SPECIAL PUBLICATION NO. 2 . 1960

Transactions of the American risheries Society

Common & Scientific Names of Fishes From the United States & Canada





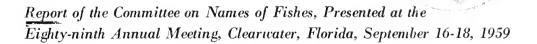
AMERICAN FISHERIES SOCIETY

Special Publication No. 2



A List of
Common and Scientific
Names of Fishes
from the United States
and Canada

(SECOND EDITION)



REEVE M. BAILEY, Chairman
ERNEST A. LACHNER, C. C. LINDSEY, C. RICHARD ROBINS
PHIL M. ROEDEL, W. B. SCOTT, LOREN P. WOODS

Copies of this publication may be purchased for \$1.00 each (paper cover) or \$2.00 (cloth cover). Orders, accompanied by remittance payable to the American Fisheries Society, should be addressed to E. A. Seaman, Secretary-Treasurer, American Fisheries Society, Box 483, McLean, Virginia.

Copyright 1960
American Fisheries Society

Printed by
Waverly Press, Inc.
Baltimore, Maryland

Introduction

This second list of the names of fishes of the United States and Canada is not simply a reprinting with corrections, but constitutes a major revision and enlargement. The earlier list, published in 1948 as Special Publication No. 1 of the American Fisheries Society, has been widely used and has contributed substantially toward its goal of achieving uniformity and avoiding confusion in nomenclature. Of the 570 names on that list, 560 are retained in the present version. The 10 removed have since proved to be synonyms of other included species, or are extralimital. In the preparation of the first list, the Committee made arbitrary decisions as to what species should be included as "better known fishes." As interest in fishes expands, it becomes increasingly difficult to determine when a given species merits an approved vernacular or common name. The present Committee has avoided this decision by attempting to include common names for all native and successfully introduced species in the region of coverage. Except for possible errors of oversight, the chief failure to realize complete listing involves small, rare, and poorly-known forms near the periphery of our area: Bering Sea, deepwater fishes that occasionally are found over the continental shelf, and Caribbean species that sporadically invade southern Florida. As knowledge of such forms increases they may be added in subsequent revisions. This list includes 1892 entries, more than a threefold increase. We make no apology for the greater length, believing that these small, less wellknown fishes have real or potential importance as laboratory experimental animals, in public or private aquaria, for bait, or, most often, simply as objects of naturalhistory inquiry or aesthetic appeal. The plan of organization and indexing are such that the inclusion of the lesser fishes need not interfere with use by those not concerned with them.

Area of Coverage

The present list purports to include all species of fishes known from the fresh waters of the continental United States and Canada, and those marine species inhabiting contiguous shore waters on or above the continental shelf, to a depth of 100 fathoms.

The shore fishes from Greenland, eastern Canada and the United States, and the northern Gulf of Mexico to the mouth of the Rio Grande are included, but those from Iceland, Bermuda, the Bahamas, Cuba and the other West Indian islands, and Mexico are excluded unless they occur also in the region covered. In the Pacific, the area treated includes that part of the continental shelf from the Mexican-United States boundary to Bering Strait. The Arctic shore waters of Alaska and Canada are included. Hawaii, with a large and strikingly different Indo-Pacific fish fauna, is excluded. Deepsea fishes, whether benthic or bathypelagic, are excluded unless they appear also within the 100-fathom isobath. In practice this line of distinction is difficult to apply, and becomes arbitrary to that extent. Pelagic fishes that enter waters over the continental shelf are included. The list provides a general guide to distribution: "A" denotes Atlantic Ocean but includes the eastern Arctic, "P" refers to Pacific Ocean and includes the western Arctic, and "F" indicates occurrence in fresh water. Appropriate combinations of letters are used for those fishes that live, either naturally or by introduction, in more than one of these regions.

COMMON NAMES

The Committee aims at the development of a body of common names that reflect broad current usage, the creation of a richer, more meaningful and colorful vernacular nomenclature, and the promotion of mechanisms that will add to stability and the universality of names applied to American fishes.

The common name as here employed is viewed as a formal, usually anglicized appellation to be used in lieu of the Latinized scientific name of a species. It is hoped, and the history of the recent past confirms, that common names may be more stable than scientific names. Certainly they should be more readily adaptable to lay uses than scientific names. There is clear need for standardization and uniformity in vernacular names not only for sport or commercial fishes, but as trade names, for aquarium fishes, in legal terminology, and as substitutes for scientific names of almost any fish

in popular or scientific writing. The Committee believes that it is desirable to establish a common name for each species of fish occurring naturally or through successful introduction in the waters of English-speaking North America.

Agreement on many names may be arrived at quickly, but others are attended by complications and marked disagreement develops. This is especially true of fish known by market names that differ from those names that are more familiar to sport fishermen, biologists or others. The existence for a single species of different names in separate parts of its geographic range creates difficulties that seem soluble only through arbitration. Conversely a given name may be employed in several places for diverse species. Although committee action on such situations may not be expected to change local use quickly, at least it seems plainly improper to sanction use of one name for two or more different species.

After wrestling with common names for over twenty years, the Committee on Names of Fishes realized the importance of establishing a set of guiding principles to be employed in the determination of names. Such a code permits a more objective appraisal of the relative merits among several names than if selection is based primarily on personal experience and preference. Consideration of many vernacular names of fishes makes it apparent that few principles can be established for which some exceptions must not be admitted. This is true because at this late date a majority of our larger and more abundant, hence important, species have such firmly established common names that it would be unrealistic to reject them. Decision on the name for a species may often be decided by weighing the pros and cons among the possible alternatives and selecting that one which best fits the aggregate of guiding criteria.

In the introduction to the earlier list of names a number of rules of procedure were itemized. Recently the Committee incorporated these into the following statement of criteria that it regards as appropriate to the selection of common names of fishes.

Principles Governing Selection of Common Names¹

1. A single vernacular name shall be accepted for each species or taxonomic unit included.—

In the present list only two fishes have two approved names: redfish and ocean perch for Sebastes marinus; cisco and lake herring for Coregonus artedii.

- 2. No two species on the list shall have the same approved name.
- 3. The expression "common" as part of a fish's name shall be avoided wherever possible.
- 4. Simplicity in names is favored.—Hyphens, suffixes, and apostrophes shall be omitted (e.g., smallmouth bass) except where they are orthographically essential (e.g., threeeye flounder), have a special meaning (e.g., C-O sole), or are necessary to avoid possible misunderstanding (e.g., cusk-eel). Compounded modifying words, including paired structures, should usually be treated as singular nouns in apposition with a group name (e.g., spottail shiner, soupfin shark), but a plural modifier should usually be placed in adjectival form (e.g., blackbanded sunfish, spotted hake). Preference shall be given to names that are short and euphonious.

The compounding of brief, familiar words into a single name, written without hyphen, may in some cases promote clarity and simplicity (e.g., tomcod, goldfish, mudminnow), but the wholesale practice of combining words, especially those that are lengthy, awkward, or unfamiliar, is deplored.

- 5. Common names shall not be capitalized in text use except for those elements that are proper names (e.g., rainbow trout but Sacramento perch).
- 6. Names intended to honor persons (e.g., Allison's tuna, Julia's darter) are not admissible.
- 7. Only clearly defined and well-marked taxonomic entities (usually species) shall be assigned common names.—Most subspecies are not suitable subjects for common names, but those forms that are so different in appearance (not just in geographic distribution) as to be distinguished readily by sport or commercial fishermen or laymen or for which a common name constitutes a significant aid in communication may merit separate names. Subspecies have importance in evolutionary inquiry but are rarely of significance to laymen or in those aspects of biological endeavor in which common names are of concern. The practice of adding geographic modifiers to designate regional

¹ First printed in 1955 (Trans. Am. Fish. Soc., Vol. 84 [1954] pp. 368-371).

populations makes for a cumbersome terminology.

8. The common name shall not be intimately tied to the scientific name.—Thus the vagaries of scientific nomenclature do not entail constant changing of common names. The practice of applying a name to each genus, a modifying name for each species, and still another modifier for each subspecies, while appealing in its simplicity, has the defect of inflexibility. If a fish is transferred from genus to genus, or shifted from species to subspecies or vice versa, the common name should nevertheless remain unaffected. It is not a primary function of common names to indicate relationship. When two or more taxonomic groups (e.g., nominal species) are found to be identical, one name shall be adopted for the combined group.

This principle is regarded not only as fundamental to the achievement of stability, but as essential to the development of a true vernacular nomenclature.

9. Names shall not violate the tenets of good taste.

The preceding principles are largely in the nature of procedural dicta. Those given below are criteria that are regarded as aids in the selection of suitable names.

- 10. Colorful, romantic, fanciful, metaphorical, and otherwise distinctive and original names are especially appropriate.—Such terminology adds to the richness and breadth of the nomenclature and yields a harvest of satisfaction to the user. Examples of such names include: Dolly Varden, madtom, hogehoker, garibaldi, pumpkinseed, flier, angelfish, midshipman, and chilipepper.
- 11. American Indian names are welcome for adoption as common names.—Those in current use include muskellunge, eulachon, mummichog, chinook, tautog, menhaden, and cisco.
- 12. Regardless of origin, truly vernacular names that are widespread and in common use by the public are to be retained wherever possible.—In addition to aboriginal names, many now well-known names of American fishes have been derived from non-English-speaking fishermen of foreign extraction: barracuda, cero, grouper, pompano (Spanish); bocaccio (Italian); capelin, inconnu (French). Although too little genuine originality is evident, many excellent names have

been developed by American immigrants. Most of these conform to principles 14 and 15 below.

- 13. Commonly employed names adopted from traditional English usage (e.g., cod, pike, sole, flounder, bass, perch, chub, minnow) may be given considerable latitude in taxonomic placement.—Adherence to customary English practice is to be preferred if this does not conflict with the broad general use of another name. Many English names, however, have been applied to similar appearing but often distantly related fishes in America. We find perch in use for representatives of at least 9 families of spinyrayed fishes. Chub appears in such diverse groups as the Salmonidae, Cyprinidae, and Kyphosidae. The ocean whitefish (Caulolatilus princeps) is not a salmonid and the blue pike (Stizostedion vitreum glaucum) is remote from the Esocidae, yet each is best known to fishermen throughout its range by the name indicated. For widely-known species the Committee believes it preferable to recognize general use than to engage in a probably futile effort to gain the general adoption of bookish or pedantic substitutes. Thus, established practice should outweigh consistency with original English usage.
- 14. Structural attributes, including color and color pattern, are desirable and are in common use in forming names.—Sailfin, flathead, slippery, giant, mottled, copper, tripletail, and a multitude of others decorate fish names. Efforts should be made to select terms that are descriptively accurate, and to hold repetition of those most frequently employed (e.g., white, black, spotted, banded) to a minimum.
- 15. Ecological characteristics are useful in making good names.—They too should be properly descriptive. Terms such as sand, rock, lake, riffle, freshwater and mountain are well known in fish names.
- 16. Geographic distribution provides suitable adjectival modifiers.—Poorly descriptive or misleading geographic characterizations (e.g., Kentucky bass for a wide-ranging species) should be corrected unless they are too deeply entrenched in current usage. In the interest of brevity it is usually possible to delete words such as lake, river, or ocean in the names of species (e.g., Colorado squawfish, not Colorado River squawfish).
- 17. Generic names may be employed outright (e.g., remora) or in modified form (e.g.,

molly, from *Mollienesia*) as common names.—Once adopted such names should be maintained even if the generic name is changed. These vernaculars should be written in Roman and without capitalization. Brevity and euphony are of especial importance for names of this type, which will probably be adopted most often for aquarium fishes or other smaller and little-known kinds that do not already have a well-established vernacular nomenclature.

18. The duplication of common names for fishes and other organisms should be avoided if possible, but names in wide general use need not be rejected on this basis alone.—The name dolphin is commonly applied to certain cetaceans and also to Coryphaena hippurus. Similarly, buffalo is employed for various artiodactyls and for suckers of the genus Ictiobus. On the basis of prevailing use these names are admissible as fish names.

19. Names that appear on official lists of names of fishes prepared by other agencies shall be preferred.

PLAN OF LIST

The list is presented as a natural or phyletic sequence of families of fishes, with the species of each family alphabetized to generic and specific names. In order to facilitate use the three classes of recent fishes (Agnatha—jawless fishes, Chondrichthyes cartilaginous fishes, and Osteichthyes—bony fishes) and the orders are indicated. For the latter, the ordinal names of the Goodrich system (formes endings) are given first, followed, in parentheses, by equivalent names employed by Regan, Jordan, Romer or others. Both common and technical names of families (idae endings) are given. Within families the sequence is alphabetical to scientific name; the occasional disadvantage of separating closely related forms within a family is regarded as more than offset by the greater ease in use.

An innovation in this edition is the inclusion of authorities for scientific names. These are commonly needed by fishery workers, who may not have ready access to the necessary references. In any event their appearance here in a single cover is a great convenience. Care has been taken to prevent errors in author's names; usage here reflects current interpretation of the International Rules on Zoological Nomenclature. In line with those rules, the author's name(s) follows the specific name directly and without

punctuation if the species, when originally described, was assigned to the same genus in which it appears here; if the species was described in another genus, the author's name(s) appears in parentheses. For example, the brook trout was originally named Salmo fontinalis by Mitchill; it appears here as Salvelinus fontinalis (Mitchill).

In preparation of the list hundreds of decisions had to be made that involved interpretation of rules of nomenclature, systematic status and limits of species, genera, and families, occurrence within the prescribed region, and other problems. Four times in six years it has been possible for a majority of the committee members to gather around a table and attack these problems together. The resultant interchange of ideas and information, extended by circulation of dozens of work lists, has made possible striking concordance on what started as areas of disagreement. There remain, to be sure, many differences of opinion, but there has been a broadened area of understanding and a spirit of good humor and willingness to compromise difficulties. Decisions have been made by majority opinion of the Committee. Thus, no committee member subscribes to all decisions reached. In many places, information available to the Committee exceeded that in the current literature. In general it has been our policy to withhold making such changes here, although we have made some considered exceptions, especially when the new data will appear shortly.

INDICES

The main list, Part I, appears on pages 6 to 50; there follow indices, Part II, to common names (pages 51 to 75) and, Part III, to scientific names (pages 76 to 102). The index to common names gives page references to approved common names of classes. families, and species. A single entry is included for each species; for example, Salmo gairdneri is entered only under "trout, rainbow." In addition to approved names, the index includes also other names that are in wide use followed by the equivalent approved name. There are a great many vernacular names of American fishes, and extensive search would be necessary to assemble even a large fraction of them. This the Committee has not attempted to do. but most of the more widely used names are included.

The index to scientific names gives page references to the names here entered for classes, orders, families, genera, and species. Each species is entered only under its specific name. For example, the bluegill may be located under "macrochirus, Lepomis" but not under Lepomis macrochirus, although an entry for Lepomis directs the reader to the proper page. Scientific names that are not accepted in this list are excluded except for those that appeared in the first edition and have since been placed in synonymy.

ACKNOWLEDGMENTS

Many persons have contributed to the preparation of this report. In addition to the present Committee, these include authors of the first edition, Walter A. Chute, W. A. Clemens, John R. Dymond, the late Samuel F. Hildebrand, George S. Myers, and Leonard P. Schultz, and others who served during the interim between the two editions, Charles M. Breder, Ralph Hile, Raymond E. Johnson, Frank T. Knapp, John C. Marr, Edward C. Raney, William E. Ricker, and Royal D. Suttkus. Specialists have been most generous in their assistance, which is much appreciated. Among the many, a few may be mentioned for their especial helpfulness: Frederick H. Berry, James E. Böhlke, John C. Briggs, Homer Circle, Daniel M.

Cohen, John E. Fitch, W. I. Follett, Earl S. Herald, Carl L. Hubbs, Clark Hubbs, William A. Kennedy, A. H. Leim, Gordon F. Luce, Jr., William R. Martin, Robert R. Miller, George A. Moore, C. Lavett Smith, William R. Taylor, Boyd W. Walker, Vladimir Walters, and Norman J. Wilimovsky.

In 1951 the American Fisheries Society approved a plan whereby the Committee on Names of Fishes of that Society would serve jointly as a Committee on Common Names of Fishes in the American Society of Ichthyologists and Herpetologists. The president of the ASIH formally appointed the Committee. Since that time this arrangement has worked smoothly. All personnel on the Committee are members of both societies and the formulation of this list, it is believed, serves common interests. Annual meetings of the ASIH have provided a convenient opportunity to assemble the joint committee to attack problems in the preparation of this list. The plan is mutually advantageous, and we hope it may continue.

We gratefully acknowledge financial assistance in the publication of this list provided by the National Science Foundation. (NSF-G12424).

PART I

Accepted Common Name, Occurrence, and Scientific Name

COMMON NAME	OCCURRENCE ¹	SCIENTIFIC NAME
	CLASS AGNATHA—JAWLESS FISHE	ES
Or	DER MYXINIFORMES (MYXINOIDEA; HYPERO	otreti)
	Myxinidae—hagfishes	
Atlantic hagfish Black hagfish Pacific hagfish		Iyxine glutinosa Linnaeus ermann and Goldsborough totrema stouti (Lockington)
Order	PETROMYZONTIFORMES (PETROMYZONTIA; F	Hyperoartii)
	Petromyzontidae—lampreys	
Allegheny brook lam Allegheny brook lam Mountain brook lam Silver lamprey Least brook lampreg River lamprey Arctic lamprey American brook lam Western brook lam	F	agei Hubbs and Trautman leyi Hubbs and Trautman chthyomyzon hubbsi Raney spis Hubbs and Trautman apetra aepyptera (Abbott) Lampetra ayresi (Günther) mpetra japonica (Martens) ampetra lamottei (LeSueur) . Lampetra planeri (Bloch)
CLASS	S CHONDRICHTHYES—CARTILAGINO	OUS FISHES
	Order Squaliformes (Selachii)	
	Hexanchidae—cow sharks	
Sixgill shark Sevengill shark		chus griseum (Bonnaterre) orynchus maculatus Ayres
	Chlamydoselachidae—frill sharks	
Frill shark		achus anguineum Garman
	Heterodontidae—horn sharks	
Horn shark	PHeter	odontus francisci (Girard)
	Carchariidae—sand sharks	,
Sand shark	A	charias taurus Rafinesque
	Lamnidae—mackerel sharks	
Rigavo throshor	Lammiqae—mackerei snarks A	loniae superciliaeus (Lowa)
Thresher shark	A-P	pias vulpinus (Bonnaterre)

¹ A = Atlantic; P = Pacific; F = Freshwater

COMMON NAME	OCCURRENCE	SCIENTIFIC NAME
Basking shark	A-P A-P IS A A A A A A A A A A A A A A A A A A	. Cetorhinus maximus (Gunnerus) surus glaucus (Müller and Henle)
	Orectolobidae—nurse shark	cs
Nurse shark		glymostoma cirratum (Bonnaterre)
	Rhincodontidae—whale sha	arks
Whale shark		Rhincodon typus Smith
	Scyliorhinidae—cat shark	SS
Swell shark Filetail cat shark False cat shark	P	scyllium uter (Jordan and Gilbert Parmaturus xaniurus (Gilbert dotriakis microdon Brito Capello
	Carcharhinidae—requiem sh	narks
Blacknose shark Bignose shark Roundnose shark Sickle shark Silky shark Bay shark Bull shark Bull shark Blacktip shark Whitetip shark Spinner shark Sandbar shark Dusky shark Narrowtooth shark Tiger shark Narrowtooth shark Tiger shark Soupfin shark Night shark Sight shark Sicklefin smoothhound Smooth dogfish Sicklefin smoothhound Florida smoothhound Lemon shark Blue shark Pacific sharpnose shark Atlantic sharpnose shark	A Apri A A P Carcharhin A Carcharhin A Carcharhin A Carcharh A Car	Carcharhinus acronotus (Poey Carcharhinus altima (Springer aus azureus (Gilbert and Starks aus falciformis (Müller and Henle charhinus floridanus Bigelow, Schroeder, and Springe inus lamiella (Jordan and Gilbert rhinus leucas (Müller and Henle hinus limbatus (Müller and Henle Carcharhinus longimanus (Poey Carcharhinus maculipinnis (Poey thinus milberti (Müller and Henle Carcharhinus obscurus (LeSueur Carcharhinus porosus (Ranzani Carcharhinus remotus (Duméril cerdo cuvieri (Peron and LeSueur nus zyopterus Jordan and Gilber Mustelus canis (Mitchill telus lunulatus Jordan and Gilber Mustelus norrisi Springe Negaprion brevirostris (Poey Prionace glauca (Linnaeus don longurio (Jordan and Gilbert Scoliodon terraenovae (Richardson
Caellanad hammarhaad	Sphyrnidae—hammerhead sl	

COMMON NAME	OCCURRENCE	SCIENTIFIC NAME
Bonnethead	A-P	Sphyrna tiburo (Linnaeus)Sphyrna zygaena (Linnaeus)
	Squalidae—dogfish sharks	
Kitefin shark	A Cen A A-P Ecc A Somniosus micn P Somniosus 7 A-P A-P A-P	Dalatias licha (Bonnaterre) hinorhinus brucus (Bonnaterre) rocephalus (Bloch and Schneider) pacificus Bigelow and Schroeder Squalus acanthias Linnaeus
	Squatinidae—angel sharks	
Pacific angel shark	P	Squatina californica AyresSquatina dumerili LeSueur
	Order Rajiformes (Batoide Pristidae—sawfishes	EI)
Smalltooth sawfish Largetooth sawfish	A	Pristis pectinatus Latham ristis perotteti Müller and Henle
	Rhinobatidae—guitarfishes	
Atlantic guitarfish Shovelnose guitarfish	P Platyrhinoidis A	Rhinobatos lentiginosus (Garman ₎ Rhinobatos productus (Ayres)
	Torpedinidae—electric rays	,
Lesser electric ray Pacific electric ray Atlantic torpedo	A P A	Narcine brasiliensis (Olfers)
	Rajidae—skates	
Aleutian skate. Big skate. Clearnose skate. Little skate. Rosette skate. California skate. Bering skate. Black skate. Barndoor skate. Freckled skate. Winter skate. Spreadfin skate. Alaska skate. Thorny skate. Longnose skate. Flathead skate.	A P A A Raja len A Raja len A P Ra	Raja aleutica Gilbert Raja binoculata Girard Raja eglanteria Bosc Raja erinacea Mitchill Raja garmani Whitley aja inornata Jordan and Gilbert ja interrupta Gill and Townsend Raja kincaidi Garman Raja laevis Mitchill ntiginosa Bigelow and Schroeder Raja ocellata Mitchill ja olseni Bigelow and Schroeder Raja parmifera Bean Raja radiata Donovan Raja rhina Jordan and Gilbert ja rosispinis Gill and Townsend

COMMON NAME	OCCURRI	ENCE SCIENTIFIC NAME		
Spinytail skate	P A			
	Dasya	ratidae—stingrays		
Southern stingray. Roughtail stingray. Diamond stingray. Atlantic stingray. Bluntnose stingray. Pelagic stingray. Spiny butterfly ray. California butterfly ray. Smooth butterfly ray Round stingray. Yellow stingray.	A P A A P A A P A P A	Dasyatis americana Hildebrand and Schroeder Dasyatis centroura (Mitchill) Dasyatis dipterurus (Jordan and Gilbert) Dasyatis sabina (LeSueur) Dasyatis sayi (LeSueur) Dasyatis violacea (Bonaparte) Gymnura altavela (Linnaeus) Gymnura marmorata (Cooper) Gymnura micrura (Bloch and Schneider) Urolophus halleri Cooper Urolophus jamaicensis (Cuvier)		
	Myliob	batidae—eagle rays		
Spotted eagle ray Bat stingray Bullnose ray Southern eagle ray Cownose ray	P A A	Aetobatus narinari (Euphrasen) Myliobatis californicus Gill Myliobatis freminvillei LeSueur Myliobatis goodei Garman Rhinoptera bonasus (Mitchill)		
	Mob	bulidae—mantas		
Atlantic manta. Pacific manta. Devil ray. Spinetail mobula. Smoothtail mobula.	P A P			
Order Chimaeriformes (Chimaerae)				
	Chima	aeridae—chimaeras		
Ratfish	P			
CLASS (STEIC	CHTHYES—BONY FISHES		
		seriformes (Chondrostei)		
		nseridae—sturgeons		
Shortnose sturgeon Lake sturgeon Green sturgeon Atlantic sturgeon White sturgeon Pallid sturgeon Shovelnose sturgeon	F P-F A-F P-F			
Polyodontidae—paddlefishes				
Paddlefish	F			

COMMON NAME

OCCURRENCE

SCIENTIFIC NAME

Order Semionotifo	RMES	(Protospondyli and Ginglymodi)
	Lepi	sosteidae—gars
Spotted gar Longnose gar Shortnose gar Florida gar Alligator gar	F F F	
Order A	Amiif	ormes (Halecomorphi)
		iidae—bowfins
D 6		
Bowhn	F	
Order (CLUP	eiformes (Isospondyli)
	Elo	pidae—tarpons
Ladyfish	\mathbf{A}	
	Albul	idae—bonefishes
Bonefish	A-P	
	Clup	eidae—herrings
Alabama shad	A-F A-F A-F-P A-A-A A A A A A A A-F-P A-F-P A-F-P	Alosa aestivalis (Mitchill) Alosa alabamae Jordan and Evermann Alosa chrysochloris (Rafinesque) Alosa mediocris (Mitchill) Alosa ohiensis Evermann Alosa pseudoharengus (Wilson) Alosa sapidissima (Wilson) Brevoortia gunteri Hildebrand Brevoortia patronus Goode Brevoortia tyrannus (Latrobe) Clupea harengus harengus Linnaeus Clupea harengus pallasi Valenciennes Dorosoma cepedianum (LeSueur) Dorosoma cepedianum (Günther) Etrumeus acuminatus Gilbert Etrumeus sadina (Mitchill) Harengula clupeola Valenciennes Harengula pensacolae Goode and Bean Harengula thrissina (Jordan and Gilbert) Jenkinsia lamprotaenia (Gosse) Opisthonema libertate (Günther)
Atlantic thread herring Spanish sardine Pacific sardine	A A P	

COMMON NAME OCCURRENCE SCIENTIFIC NAME

Engraulidae—anchovies

Key anchovy..... P Deepbody anchovy..... Cuban anchovy..... Α Slough anchovy..... New Jersey anchovy..... Α Striped anchovy..... Anchoa hepsetus (Linnaeus) A ΑAnchoa lamprotacnia Hildebrand Longnose anchovy..... Dusky anchovy...... Α A Bay anchovy...... Α Silver anchovy.....

Salmonidae—trouts, whitefishes, and graylings

P

A

Slim anchovy.....

Anchoveta.......

.........Anchoviella miarcha (Jordan and Gilbert)

..... Anchoviella perfasciata (Poey)

		, , , , , , , , , , , , , , , , , , , ,
Longjaw cisco	\mathbf{F}	Coregonus¹ alpenae (Koelz)
Cisco or lake herring	\mathbf{F}	Coregonus artedii LeSueur
Arctic cisco	\mathbf{F}	
Lake whitefish		
Bloater		
Deepwater cisco	\mathbf{F}	
Kiyi	\mathbf{F}	
Broad whitefish	\mathbf{F}	
Blackfin cisco		
Nipigon cisco	\mathbf{F}	
Humpback whitefish	$\underline{\mathbf{F}}$	
Shortnose cisco	\mathbf{F}	
Least cisco	$\overline{\mathbf{F}}$	
Shortjaw cisco	F	Coregonus zenithicus (Jordan and Evermann)
Pink salmon	7-E-F	P Oncorhynchus gorbuscha (Walbaum)
Chum salmon	P-F	Oncorhynchus keta (Walbaum)
		Walse and the control of the c
Coho salmon	\-F-F	P Oncorhynchus kisutch (Walbaum)
Coho salmon	\-F-F P-F	Oncorhynchus kisutch (Walbaum) Oncorhynchus nerka (Walbaum)
Coho salmon	\-F-F P-F P-F	Oncorhynchus kisutch (Walbaum) Oncorhynchus nerka (Walbaum) Oncorhynchus tshawytscha (Walbaum)
Coho salmon	\-F-F P-F P-F F	Oncorhynchus kisutch (Walbaum) Oncorhynchus nerka (Walbaum) Oncorhynchus tshawytscha (Walbaum) Prosopium abyssicola (Snyder)
Coho salmon	N-F-F P-F P-F F F	Oncorhynchus kisutch (Walbaum) Oncorhynchus nerka (Walbaum) Oncorhynchus tshawytscha (Walbaum) Prosopium abyssicola (Snyder) Prosopium coulteri (Eigenmann and Eigenmann)
Coho salmon	\-F-F P-F P-F F F F	Oncorhynchus kisutch (Walbaum) Oncorhynchus nerka (Walbaum) Oncorhynchus tshawytscha (Walbaum) Prosopium abyssicola (Snyder) Prosopium coulteri (Eigenmann and Eigenmann) Prosopium cylindraceum (Pallas)
Coho salmon	A-F-F P-F P-F F F F F	Oncorhynchus kisutch (Walbaum) Oncorhynchus nerka (Walbaum) Oncorhynchus tshawytscha (Walbaum) Prosopium abyssicola (Snyder) Prosopium coulteri (Eigenmann and Eigenmann) Prosopium cylindraceum (Pallas) Prosopium gemmiferum (Snyder)
Coho salmon	1-F-F P-F P-F F F F F	Oncorhynchus kisutch (Walbaum) Oncorhynchus nerka (Walbaum) Oncorhynchus tshawytscha (Walbaum) Prosopium abyssicola (Snyder) Prosopium coulteri (Eigenmann and Eigenmann) Prosopium cylindraceum (Pallas) Prosopium gemmiferum (Snyder) Prosopium spilonotus (Snyder)
Coho salmon	\-F-F P-F P-F F F F F F	Oncorhynchus kisutch (Walbaum) Oncorhynchus nerka (Walbaum) Oncorhynchus tshawytscha (Walbaum) Prosopium abyssicola (Snyder) Prosopium coulteri (Eigenmann and Eigenmann) Prosopium cylindraceum (Pallas) Prosopium gemmiferum (Snyder) Prosopium spilonotus (Snyder) Prosopium williamsoni (Girard)
Coho salmon	\-F-F P-F P-F F F F F F F	Oncorhynchus kisutch (Walbaum) Oncorhynchus nerka (Walbaum) Oncorhynchus tshawytscha (Walbaum) Prosopium abyssicola (Snyder) Prosopium coulteri (Eigenmann and Eigenmann) Prosopium cylindraceum (Pallas) Prosopium gemmiferum (Snyder) Prosopium spilonotus (Snyder) Prosopium williamsoni (Girard) Salmo aguabonita Jordan
Coho salmon	\-F-F P-F P-F F F F F-F	Oncorhynchus kisutch (Walbaum) Oncorhynchus nerka (Walbaum) Oncorhynchus tshawytscha (Walbaum) Prosopium abyssicola (Snyder) Prosopium coulteri (Eigenmann and Eigenmann) Prosopium cylindraceum (Pallas) Prosopium gemmiferum (Snyder) Prosopium spilonotus (Snyder) Prosopium williamsoni (Girard) Salmo aguabonita Jordan Salmo clarki Richardson
Coho salmon Sockeye salmon ² Chinook salmon Bear Lake whitefish Pygmy whitefish Round whitefish Bonneville cisco Bonneville whitefish Mountain whitefish Golden trout Cutthroat trout Rainbow trout ³	A-F-H P-F P-F F F F F F F P-F A-F-H	Oncorhynchus kisutch (Walbaum) Oncorhynchus nerka (Walbaum) Oncorhynchus tshawytscha (Walbaum) Prosopium abyssicola (Snyder) Prosopium coulteri (Eigenmann and Eigenmann) Prosopium cylindraceum (Pallas) Prosopium gemmiferum (Snyder) Prosopium spilonotus (Snyder) Prosopium williamsoni (Girard) Salmo aguabonita Jordan Salmo clarki Richardson Salmo gairdneri Richardson
Coho salmon Sockeye salmon ² Chinook salmon Bear Lake whitefish Pygmy whitefish Round whitefish Bonneville cisco Bonneville whitefish Mountain whitefish Golden trout Cutthroat trout Rainbow trout ³ Gila trout	A-F-H P-F P-F F F F F F P-F A-F-H	Oncorhynchus kisutch (Walbaum) Oncorhynchus nerka (Walbaum) Oncorhynchus tshawytscha (Walbaum) Prosopium abyssicola (Snyder) Prosopium coulteri (Eigenmann and Eigenmann) Prosopium cylindraceum (Pallas) Prosopium gemmiferum (Snyder) Prosopium spilonotus (Snyder) Prosopium williamsoni (Girard) Salmo aguabonita Jordan Salmo clarki Richardson

¹ The genus Coregonus is here employed to include species referred by some authors to Leucichthys.

² Lacustrine sockeye salmon stocks are known as kokanee.
4 Rainbow trout are commonly called steelhead trout when they enter or return from the sea and large inland lakes.

4 Rainbow trout are commonly called steelhead trout when they enter or return from the sea and large inland lakes.

⁴ Lake populations of Atlantic salmon are variously known as ouananiche, lake Atlantic salmon, landlocked salmon, and Sebago salmon.

COMMON NAME	occurr	ENCE	SCIENTIFIC NAME
Arctic char ¹	A-F-] A-F P-F	P	
	Osr	meridae—smelts	
Pond smelt Surf smelt Capelin Arctic smelt American smelt Longfin smelt Night smelt Sacramento smelt.	P-F P-F A-P P-F P-F P-F	Spirii	Allosmerus elongatus (Ayres)
	Argen	tinidae—argentin	es
Pacific argentine	P A		
	Bathylag	idae²—deepsea sı	melts
California smoothtongue	P		Leuroglossus stilbius Gilbert
	Opisthop	oroctidae³—barrel	leyes
Barreleye	P		$. \it Macropinna\ microstoma\ Chapman$
	Hiodo	ontidae—mooney	es
Goldeye Mooneye	$\begin{array}{ccc} \dots & F \\ \dots & F \end{array}$		<i>Hiodon alosoides</i> (Rafinesque) <i>Hiodon tergisus</i> LeSueur
	Umbri	dae—mudminno	ws
Alaska blackfish Olympic mudminnow Central mudminnow Eastern mudminnow	$egin{array}{lll} \dots & \mathbf{F} \\ \dots & \mathbf{F} \end{array}$		
	E	socidae—pikes	
Redfin pickerel. Grass pickerel. Chain pickerel. Northern pike. Muskellunge ⁴ .	F		Esox americanus americanus Gmelin ox americanus vermiculatus LeSueur Esox niger LeSueur Esox lucius Linnaeus Esox masquinongy Mitchill

Sunapee trout, blueback trout, and Quebec red trout are regarded by some authors as species distinct from the Arctic char.
 Most deepsea smelts are bathypelagic; few enter water less than 100 fathoms deep.
 Bathypelagic fishes of which one species has been recorded as a straggler in our area.
 Spelled maskinonge in Ontario and Quebec.

COMMON NAME OCCURRENCE SCIENTIFIC NAME

Order Myctophiformes (Iniomi) Synodontidae—lizardfishes Largescale lizardfish..... Saurida brasiliensis Norman Smallscale lizardfish.....Saurida normani Longley Shortjaw lizardfish.....Synodus foetens (Linnaeus) Inshore lizardfish.....Synodus intermedius (Agassiz) Sand diver..... California lizardfish......Synodus lucioceps (Ayres) Offshore lizardfish..... ΑSynodus poeyi Jordan Synodus synodus (Linnaeus) Trachinocephalus myops (Forster) Red lizardfish..... Snakefish Scopelarchidae—pearleyes Northern pearleye..... Myctophidae—lanternfishes The many species of lanternfishes are chiefly bathypelagic, but occasional stragglers are found over the continental shelf. Alepisauridae—lancetfishes ORDER CYPRINIFORMES (OSTARIOPHYSI) Characidae—characins and tetras Mexican tetra..... Cyprinidae—minnows and carps Acrocheilus alutaceus Agassiz and Pickering Chiselmouth..... Longfin dace..... Campostoma anomalum (Rafinesque) Mexican stoneroller..... \mathbf{F} F Carassius auratus (Linnaeus) Northern redbelly dace..... \mathbf{F} \mathbf{F} Southern redbelly dace..... Finescale dace..... F Mountain redbelly dace..... F F Redside dace..... Rosyside dace..... \mathbf{F} \mathbf{F} Carp..... Devils River minnow..... FDionda episcopa Girard Roundnose minnow...... FDionda nubila (Forbes) Ozark minnow..... \mathbf{F} Eremichthys acros Hubbs and Miller Desert dace..... Silverjaw minnow..... F \mathbf{F} Cutlips minnow..... Utah chub..... Blue chub..... \mathbf{F} Thicktail chub..... \mathbf{F}

Humpback chub.....

COMMON NAME	OCCURRENCE	SCIENTIFIC NAME

Sonora chub	\mathbf{F}	
Rio Grande chub	\mathbf{F}	
Arroyo chub	$\overline{\mathbf{F}}$	
Yaqui chub	$ar{ ext{F}}$	
Bonytail	F	
Flame chub	$\dot{\mathbf{F}}$	
California roach	$\ddot{\mathbf{F}}$	Hesperoleucus symmetricus (Baird and Girard)
	\mathbf{F}	Hesperoleucus symmetricus (Dand and Grard)
Brassy minnow		
Cypress minnow	\mathbf{F}	
Silvery minnow	\mathbf{F}	
Speckled chub	\mathbf{F}	
Bigeye chub	\mathbf{F}	
Alabama chub	\mathbf{F}	
Hornyhead chub	\mathbf{F}	
Slender chub	\mathbf{F}	
Oregon chub	\mathbf{F}	
Streamline chub	\mathbf{F}	
Sturgeon chub	\mathbf{F}	
Flathead chub	\mathbf{F}	
Redeye chub	$ar{ ext{F}}$	
Highback chub	$\mathbf{\tilde{F}}$	
Blotched chub	${f ilde{F}}$	
Thicklip chub	\mathbf{F}	
Bluehead chub	F	
	F	
Sicklefin chub		
River chub	F	
Spotfin chub	F	
Lake chub	$_{\mathrm{F}}$	
Rosyface chub	\mathbf{F}	
Silver chub	\mathbf{F}	
Gravel chub	\mathbf{F}	
Least chub	\mathbf{F}	
Hitch	\mathbf{F}	Lavinia exilicauda Baird and Girard
Little Colorado spinedace	\mathbf{F}	Lepidomeda vittata Cope
Spikedace	\mathbf{F}	
Moapa dace	\mathbf{F}	
Peamouth	\mathbf{F}	
Hardhead	\mathbf{F}	Mylopharodon conocephalus (Baird and Girard)
Golden shiner	${f ilde{F}}$	
White shiner	F	
Whitemouth shiner	F	
Highfin shiner	$\dot{\mathbf{F}}$	
Texas shiner	\mathbf{F}	
Dellid chiner	$\ddot{\mathbf{F}}$	
Pallid shiner		Motronia amanua (Abbatt)
Comely shiner	F	
Satinfin shiner	F	
Pugnose shiner	F	
Rosefin shiner	\mathbf{F}	
Popeye shiner	\mathbf{F}	
Burrhead shiner	\mathbf{F}	Notropis asperifrons Suttkus and Raney
Emerald shiner	\mathbf{F}	

¹ The genus Hybopsis is here employed to include species referred by some authors to Couesius, Erimystax, Extrarius, Macrhybopsis, Nocomis, Oregonichthys, and Platygobio.

COMMON NAME	OCCURE	RENCE	SCIENTIFIC NAME
Blackspot shiner	F		. Notropis atrocaudalis Evermann
Rough shiner	F		tropis baileyi Suttkus and Raney
Red River shiner	F	Notrom	is bairdi Hubba and Ortanburgan
			is bairdi Hubbs and Ortenburger
Pretty shiner	F		Notropis bellus (Hay)
River shiner	F		Notropis bifrenatus (Cope)
			Notropis blennius (Girard)
Bigeye shiner	F		
Tamaulipas shiner			is braytoni Jordan and Evermann
Brazos shiner	F		s brazosensis Hubbs and Bonham
Smalleye shiner	$egin{array}{lll} \dots & \mathbf{F} \\ \dots & \mathbf{F} \end{array}$		Notropis buccula Cross
Ghost shiner			Notropis buchanani Meek
Oemulgee shiner	F		Notropis caeruleus (Jordan)
Ocmulgee shiner	$egin{array}{lll} \dots & & \mathbf{F} \\ \dots & & \mathbf{F} \end{array}$		Notropis callisema (Jordan)
Alabama shiner	F		Notropis callistius (Jordan)
Bluestripe shiner Bluntface shiner	F		copis callitaenia Bailey and Gibbs
Crescent shiner	F		opis camurus (Jordan and Meek)
Ironcolor shiner	F		Notropis cerasinus (Cope)
Chihuahua shiner	F	• • • • • • • • • • • • • • • • • • • •	Notropis chalybaeus (Cope)
Dodlin shiner	$egin{array}{lll} \dots & & \mathbf{F} \\ \dots & & \mathbf{F} \end{array}$		Notropis chihuahua Woolman
Redlip shiner	F		Notropis chiliticus (Cope)
Greenfin shinerGreenhead shiner	F		chloristius (Jordan and Brayton)
			Notropis chlorocephalus (Cope)
Rainbow shiner	F	• • • • • • • • • • • • • • • • •	Notropis chrosomus (Jordan)
Warpaint shiner	F	• • • • • • • • • • • • • • • • • • • •	Notropis coccogenis (Cope)
Common shiner	F		Notropis cornutus (Mitchill)
Dusky shiner	F		Notropis cummingsae Myers
Bigmouth shiner	F		Notropis dorsalis (Agassiz)
Broadstripe shiner	F		Notropis euryzonus Suttkus
Ribbon shiner	F		Notropis fumeus Evermann
Whitetail shiner	F		Notropis galacturus (Cope)
Arkansas River shiner	F		s girardi Hubbs and Ortenburger
Wedgespot shiner	F		s greenei Hubbs and Ortenburger
Blackchin shiner			Notropis heterodon (Cope)
Blacknose shiner		Notropis neterot	epis Eigenmann and Eigenmann
Spottail shiner	F		Notropis hudsonius (Clinton)
Sailfin shiner	F	λ7	Notropis hypselopterus (Günther)
Highscale shiner	F		ois hypsilepis Suttkus and Raney
Silverband shiner	$\dots F$		Notropis illecebrosus (Girard)
Rio Grande shiner	F		Notropis jemezanus (Cope)
Ohoopee shiner	F		Notropis leedsi Fowler
Plateau shiner	F		Notropis lepidus (Girard)
Tennessee shiner			Notropis leuciodus (Cope)
Mountain shiner			Notropis lirus (Jordan)
Longnose shiner	F	37 /	Notropis longirostris (Hay)
Yellowfin shiner			lutipinnis (Jordan and Brayton)
Red shiner	F		opis lutrensis (Baird and Girard)
Taillight shiner	F		Notropis maculatus (Hay)
Pinewoods shiner	F		Notropis matutinus (Cope)
Whitefin shiner	F		Notropis niveus (Cope)
Kiamichi shiner	F	7.7.4	Notropis ortenburgeri Hubbs
Sharpnose shiner	F		oxyrhynchus Hubbs and Bonham
Ozark shiner	F	• • • • • • • • • • • • • • • • • • • •	Notropis ozarcanus Meek
Plains shiner	F		Notropis percobromus (Cope)
Colorless shiner	F	$\dots Notro$	pis perpallidus Hubbs and Black

COMMON NAME	occurr	ENCE	SCIENTIFIC NAME
Coastal shiner	F		
Silver shiner	F		
Chub shiner	F		Notropis potteri Hubbs and Bonham
Swallowtail shiner	F		
Proserpine shiner	F		
Fieryblack shiner	F		
Cherryfin shiner	F		
Rosyface shiner	F	• • • • • • •	
Saffron shiner	F		
Sabine shiner	F		Notropis sabinae Jordan and Gilbert
New River shiner	F		
Sandbar shiner	F		Notronia coentieva (Jordan and Cilbert)
Flagfin shiner	Tr		Notropis scepticus (Jordan and Gilbert) Notropis signipinnis Bailey and Suttkus
Bluntnose shiner	F		
Minner chiner	F		
Mirror shiner			Notronio anilantana (Cana)
Spotfin shiner	\cdots F		
Silverstripe shiner	<u>r</u>		
Sand shiner	F		
Tondra shiner	F		
Topeka shiner	F		
Tricolor shiner	\cdots \mathbf{F}		Notropis trichroistius (Jordan and Gilbert)
Redfin shiner	\dots F		
Stargazing shiner	<u>F</u>		Notropis uranoscopus Suttkus
Blacktail shiner	<u>F</u>		
Mimic shiner	<u>F</u>		
Bluenose shiner	\dots $\underline{\mathbf{F}}$		Notropis welaka Evermann and Kendall
Steelcolor shiner	<u>F</u>		
Coosa shiner	<u>F</u>		Notropis xaenocephalus (Jordan)
Altamaha shiner	\dots $\underline{\mathbf{F}}$		
Bleeding shiner	<u>F</u>		
Bandfin shiner	<u>F</u>		Notropis zonistius (Jordan)
Pugnose minnow	<u>F</u>		Opsopoeodus emiliae Hay
Sacramento blackfish			Orthodon microlepidotus (Ayres)
Tonguetied minnow	<u>F</u>		
Riffle minnow	<u>F</u>		
Suckermouth minnow			
Kanawha minnow	<u>F</u>		
Stargazing minnow	\dots $\underline{\mathrm{F}}$		
Bluntnose minnow	<u>F</u>		
Fathead minnow			
Slim minnow	F		
Bullhead minnow	\dots F		Pimephales vigilax (Baird and Girard)
Woundfin	\dots F		
Splittail	F		Pogonichthys macrolepidotus (Ayres)
Sacramento squawfish	\dots F		
Colorado squawfish	F		Ptychocheilus lucius Girard
Northern squawfish	F		Ptychocheilus oregonensis (Richardson)
Umpqua squawfish	F		Ptychocheilus umpquae Snyder
Blacknose dace	\dots F		Rhinichthys atratulus (Hermann)
Longnose dace	F		Rhinichthys cataractae (Valenciennes)
Umpqua dace	\dots F		
Leopard dace	F	.Rhinicht	thys falcatus (Eigenmann and Eigenmann)
Speckled dace	F		
Bitterling	$$ $ m ilde{F}$		
-			

COMMON NAME	OCCURRENCE	SCIENTIFIC NAME
Redside shiner. Lahontan redside. Rudd. Creek chub. Fallfish. Pearl dace. Tui chub. Mohave chub. Leatherside chub. Loach minnow. Tench.	F Ri F Scardinius F Semo F Se F F F Snyderichthy F F	sonius balteatus (Richardson) chardsonius egregius (Girard) erythrophthalmus (Linnaeus) tilus atromaculatus (Mitchill) emotilus corporalis (Mitchill) . Semotilus margarita (Cope) Siphateles bicolor (Girard) Siphateles mohavensis Snyder ys copei (Jordan and Gilbert)
	Catostomidae—suckers	,
River earpsucker. Quillback. Plains carpsucker. Highfin carpsucker. Utah sucker. Longnose sucker. Bridgelip sucker. White sucker. Webug sucker. Sonora sucker. Flannelmouth sucker. Lost River sucker. Largescale sucker. Modoc sucker. Sacramento sucker. Klamath smallscale sucker.	F	Carpiodes carpio (Rafinesque) Carpiodes cyprinus (LeSueur)Carpiodes forbesi Hubbs Carpiodes velifer (Rafinesque) us ardens Jordan and Gilbert tostomus catostomus (Forster) .Catostomus columbianus Eigenmann and Eigenmann) tomus commersoni (Lacépède) us fecundus Cope and Yarrow us insignis Baird and Girard s latipinnis Baird and GirardCatostomus luxatus (Cope) tostomus macrocheilus GirardCatostomus microps Rutter Catostomus occidentalis Ayres rimiculus Gilbert and Snyder
Klamath largescale sucker Tahoe sucker Warner sucker Shortnose sucker Cui-ui¹ June sucker Blue sucker Creek chubsucker Lake chubsucker Lake chubsucker Northern hog sucker Roanoke hog sucker Smallmouth buffalo Bigmouth buffalo Black buffalo Harelip sucker Spotted sucker Silver redhorse Bigeye jumprock Blackfin sucker	F	Catostomus snyderi Gilbert Catostomus snyderi Gilbert Catostomus snyderi Gilbert Chasmistes Gill and Jordan atostomus warnerensis Snyder Chasmistes brevirostris Cope Chasmistes cujus Cope Chasmistes liorus Jordan Cycleptus elongatus (LeSueur) Erimyzon oblongus (Mitchill) Erimyzon sucetta (Lacépède) Erimyzon tenuis (Agassiz) pentelium etowanum (Jordan) pentelium nigricans (LeSueur) anokense Raney and Lachner Ictiobus bubalus (Rafinesque) us cyprinellus (Valenciennes) Ictiobus niger (Rafinesque) a lacera Jordan and Brayton atrema melanops (Rafinesque) stoma anisurum (Rafinesque) riommum Robins and Raney Moxostoma atripinne Bailey

¹ Pronounced kweé-wee.

COMMON NAME OC	CURRENCE	SCIENTIFIC NAME
Shorthead redhorse River redhorse Black jumprock V-lip redhorse Gray redhorse Carolina redhorse Black redhorse Black redhorse Golden redhorse Rustyside sucker Copper redhorse Greater jumprock Neuse redhorse Northern redhorse Suckermouth redhorse Blacktail redhorse Torrent sucker Smallfin redhorse Striped jumprock Greater redhorse Gila sucker Bluehead sucker White River sucker Mountain sucker Rio Grande sucker Lahontan sucker Santa Ana sucker Green sucker Humpback sucker Humpback sucker	F Mode F Mode F Moxostoma cong F Moxostoma F Moxostoma hamil F Moxostoma hamil F Moxostoma le F Moxostoma F Moxostoma F Moxostoma F Moxostoma F Moxostoma rupis F Moxostoma rupis F Pantosteus F Pantosteus	Toxostoma breviceps (Cope) xostoma carinatum (Cope) oxostoma cervinum (Cope) oxostoma collapsum (Cope) oxostoma collapsum (Cope) gestum (Baird and Girard) oxostoma coregonus (Cope) stoma duquesnei (LeSueur) a crythrurum (Rafinesque) toni (Raney and Lachner) Toxostoma hubbsi Legendre oxostoma lachrymale (Cope) macrolepidotum (LeSueur) stoma pappillosum (Cope) stoma pappillosum (Thoburn) oxostoma robustum (Cope) stoma poecilurum (Thoburn) oxostoma robustum (Cope) stoma valenciennesi Jordan clarki (Baird and Girard) antosteus delphinus (Cope) steus intermedius (Tanner) steus platyrhynchus (Cope) debeius (Baird and Girard) Pantosteus lahontan Rutter intosteus santaanae Snyder Pantosteus virescens Cope grauchen texanus (Abbott)
Transposed Sacret	Cobitidae—loaches	gradient todande (1155ett)
Oriental weatherfish	FMisgurnus	anguillicaudatus (Cantor)
	Ariidae—sea catfishes	
Gafftopsail catfish	A	Bagre marinus (Mitchill) (aleichthys felis (Linnaeus)
Ictalu	ıridae—freshwater catfishes	
White catfish Blue catfish Headwater catfish Black bullhead Yellow bullhead Brown bullhead Flat bullhead Yaqui catfish Channel catfish Mountain madtom Slender madtom Stonecat Black madtom Carolina madtom Orangefin madtom Tadpole madtom	F	Ictalurus catus (Linnaeus) Italurus furcatus (LeSueur) Ictalurus lupus (Girard) Ictalurus melas (Rafinesque) Ictalurus natalis (LeSueur) Iurus nebulosus (LeSueur) Iurus platycephalus (Girard) Ictalurus pricci (Rutter) Ius punctatus (Rafinesque) Ictalurus eleutherus Jordan Ictalurus flavus Rafinesque Inchris Gilbert and Swain Iuriosus Jordan and Meek Intrictaturus gyrinus (Mitchill)

COMMON NAME	OCCURRENCE	SCIENTIFIC NAME
Least madtom Margined madtom Speckled madtom Brindled madtom Freekled madtom Flathead catfish Widemouth blindcat Toothless blindcat	F F Notur F Sat	s hildebrandi (Bailey and Taylor)Noturus insignis (Richardson)Noturus leptacanthus JordanNoturus miurus Jordan rus nocturnus Jordan and GilbertPylodictis olivaris (Rafinesque) an eurystomus Hubbs and Bailey rogloglanis pattersoni Eigenmann
Or	DER ANGUILLIFORMES (APO	
	Anguillidae—freshwater eel	
American eel	A-F	Anguilla rostrata (LeSueur)
	Muraenidae—morays	
Pygmy moray Chain moray Viper moray Green moray California moray Spotted moray Blackedge moray Purplemouth moray Goldentail moray Reticulate moray	A Er	
	Nemichthyidae—snipe eels	3
Fishes of this family inhabit in this list.	•	ot members of the fauna covered
	Congridae—conger eels	
Bandtooth conger Margintail conger Conger eel Manytooth conger Yellow conger Whiptail conger Silver conger Slender pike eel Catalina conger	A	Ariosoma impressa (Poey)Conger caudilimbatus (Poey)Conger oceanicus (Mitchill)Conger triporiceps Kanazawa Congrina flava (Goode and Bean)Congrina gracilior GinsburgHoplunnis macrurus GinsburgNeoconger mucronatus Girard Rhynchocymba catalinensis Wade
	Ophichthidae—snake eels	
Key worm eel. Whip eel. Sooty eel. Surf eel. Blotched snake eel. Shorttail snake eel. Ridgefin eel. Horsehair eel. Thread eel. California worm eel.	A Bascanicht A Basca A Callechelys A Crypt A Gordiic A Gordiic	Ahlia egmontis (Jordan) Thys scuticaris (Goode and Bean) Michthys teres (Goode and Bean) Muchthys teres (Goode and Bean) Muraena Jordan and Evermann Muraena Jordan and Evermann Muraena Jordan and Evermann Muraena Ginsburg Mothys irretitus Jordan and Davis Mordiichthys springeri Ginsburg Mordiichthys fryi Myers and Storey

COMMON NAME OC	CURR	ENCE	SCIENTIFIC NAME
Goldspotted eel. Tiger snake eel. Speckled worm eel. Spotted spoon-nose eel. Stippled spoon-nose eel. Shrimp eel. Palespotted eel. Spotted snake eel. Pacific snake eel. Yellow snake eel. Finless eel.	P A A A A A A P P		Myrichthys oculatus (Kaup) Myrichthys tigrinus Girard Myrophis punctatus Lütken his intertinctus (Richardson) Mystriophis mordax (Poey) Mystriophis punctifer (Kaup) ohichthus gomesi (Castelnau) ohichthus ocellatus (LeSueur) Ophichthus ophis (Linnaeus) Ophichthus triserialis (Kaup) ohochir (Jordan and Gilbert) Verma kendalli (Gilbert)
Mustard eel			somma aphododera Ginsburg
N	otaca	ANTHIFORMES (HETERO nthidae—spiny eels	
Spiny eel			
		IFORMES (SYNENTOGNAT	rhi)
		eresocidae—sauries	
Pacific saury	P A	Sco	Cololabis saira (Brevoort) emberesox saurus (Walbaum)
	Belon	idae—needlefishes	
Flat needlefish. Agujon. California needlefish. Atlantic needlefish. Redfin needlefish. Houndfish. Timucu.	A P A A		blennes hians (Valenciennes) Strongylura acus (Lacépède) . Strongylura exilis (Girard) ongylura marina (Walbaum) . Strongylura notata (Poey) gylura raphidoma (Ranzani) ongylura timucu (Walbaum)
He	emira	mphidae—halfbeaks	
Hardhead halfbeak Flying halfbeak Ribbon halfbeak Balao Ballyhoo Longfin halfbeak California halfbeak Halfbeak	A A P A A P		therinoides Goode and Bean Euleptorhamphus velox Poey mphus viridis (van Hasselt) Hemiramphus balao LeSueur phus brasiliensis (Linnaeus) s saltator Gilbert and Starks s rosae (Jordan and Gilbert) phus unifasciatus (Ranzani)
F	xocoe	etidae—flyingfishes	
California flyingfish Clearwing flyingfish Margined flyingfish Bandwing flyingfish Spotfin flyingfish Atlantic flyingfish	P A A A A		selurus californicus (Cooper) ypselurus comatus (Mitchill) s cyanopterus (Valenciennes) pselurus exsiliens (Linnaeus) ypselurus furcatus (Mitchill) lurus heterurus (Rafinesque)

COMMON NAME	OCCURR	ENCE	SCIENTIFIC NAME
Tropical two-wing flyingfish Sharpchin flyingfish Fourwing flyingfish Smallwing flyingfish Sailfin flyingfish Bluntnose flyingfish	A P A A		
Order Cy	PRINOI	OONTIFORM	ES (MICROCYPRINI)
(Cyprine	odontidae-	-killifishes
T) 1 11110 1			

Diamond killifish	A	
White River killifish	$\overline{\mathrm{F}}$	
Railroad Valley killifish		
Leon Springs pupfish		
Devils Hole pupfish		
Comanche Springs pupfish	${f ilde{F}}$	
Lake Eustis minnow	$\hat{\mathbf{F}}$	
Desert pupfish	$\hat{ ext{F}}$	
Nevada pupfish	F	
Trottaa papaanii ii	-	Eigenmann and Eigenmann
Owens River pupfish	\mathbf{F}	
Red River pupfish		
Salt Creek pupfish	F	
Sheepshead minnow	A-F	
Pahrump killifish	\mathbf{F}	
Ash Meadows killifish	$\dot{\mathbf{F}}$	
Goldspotted killifish	Å	
Whiteline topminnow	$\ddot{\mathbf{F}}$	
Northern studfish	F	Fundulus catenatus (Storer)
Golden topminnow	F	
Banded topminnow	$\dot{\mathbf{F}}$	Fundulus cingulatus Valenciennes
Marsh killifish	Ā-F	Fundulus confluentus Goode and Bean
Banded killifish	F	
Gulf killifish	Ā	Fundulus grandis Baird and Girard
Mummichog		Fundulus heteroclitus (Linnaeus)
Saltmarsh topminnow	Ã-F	
Plains killifish	$\tilde{\mathbf{F}}$	
Spotfin killifish		
Striped killifish	A	Fundulus majalis (Walbaum)
Blackstripe topminnow	F	Fundulus notatus (Rafinesque)
Starhead topminnow	F	
Blackspotted topminnow	$\hat{\mathbf{F}}$	Fundulus olivaceus (Storer)
California killifish	P-F	Fundulus parvipinnis Girard
Bayou killifish	Ā-F	Fundulus pulvereus (Evermann)
Speckled killifish	F	Fundulus rathbuni Jordan and Meek
Plains topminnow	$\hat{ ext{F}}$	
Seminole killifish	F	Fundulus seminolis Girard
Longnose killifish	Ā	Fundulus similis (Baird and Girard)
Southern studfish	F	Fundulus stellifer (Jordan)
Waccamaw killifish	F	Fundulus waccamensis Hubbs and Raney
Rio Grande killifish	F	Fundulus zebrinus Jordan and Gilbert
Flagfish	$ar{ ext{F}}$	
	-	The second secon

COMMON NAME	CCURRENCE	SCIENTIFIC NAME		
Pygmy killifish Bluefin killifish Rainwater killifish Rivulus	. F	Leptolucania ommata (Jordan)Lucania goodei Jordan nia parva (Baird and Girard)Rivulus marmoratus Poey		
	Poeciliidae—livebearers			
Mosquitofish. Big Bend gambusia. Largespring gambusia. Clear Creek gambusia. Pecos gambusia. Blotched gambusia. Least killifish. Amazon molly. Sailfin molly. Gila topminnow.	F	usia affinis (Baird and Girard)		
	Amblyopsidae—cavefishes			
Ozark cavefish Northern cavefish Spring cavefish Swampfish Southern cavefish	. F	Amblyopsis rosae (Eigenmann) Amblyopsis spelaea DeKay Chologaster agassizi Putnam Chologaster cornuta Agassiz phlichthys subterraneus Girard		
Orde	R GADIFORMES (ANACANTHI	NI)		
G	adidae—codfishes and hakes			
Polar cod Arctic cod Cusk Saffron cod Fourbeard rockling Pacific cod Atlantic cod Greenland cod Burbot Haddock Silver hake Pacific tomcod Atlantic tomcod Longfin hake Pollock Walleye pollock Squirrel hake Gulf hake Carolina hake Southern hake Spotted hake White hake	. A-P . A			
Macrouridae—grenadiers ¹				
Marlin-spike	. A	umia bairdi (Goode and Bean)		

¹ Most grenadiers, or rat-tails, live in deep water, but one species is found in Atlantic shore waters.

COMMON NAME	OCCURRE	ENCE	SCIENTIFIC NAME
Order Gasterosteiformes		ostei + Hemibran Lenichthyes)	меніі + Lophobranchii +
	Gasterost	eidae—sticklebacks	
Brook stickleback Threespine stickleback	F A-F-F	· · · · · · · · · · · · · · · · · · ·	A peltes quadracus (Mitchill) . Eucalia inconstans (Kirtland) Gasterosteus aculeatus Linnaeus Gasterosteus wheatlandi Putnam Pungitius pungitius (Linnaeus)
	Aulorhyn	nchidae—tube-snouts	
Tube-snout	P		Aulorhynchus flavidus Gill
	Auloston	nidae—trumpetfishes	
Trumpetfish			stomus maculatus Valenciennes
•		riidae—cornetfishes	
Cornetfish			Fistularia tabacaria Linnaeus
	Centris	scidae—snipefishes	
Slender snipefish	A-P		acrorhamphosus gracilis (Lowe) hamphosus scolopax (Linnaeus)
Syng	nathidae-	—pipefishes and seah	orses
Whitenose pipefish Crested pipefish Swivelhead pipefish Spotted seahorse Pacific seahorse Offshore seahorse Offshore seahorse Dwarf seahorse Fringed pipefish Insular pipefish Banded pipefish Opossum pipefish Snubnose pipefish Barred pipefish Barred pipefish Bubnose pipefish Nortfin pipefish Nortfin pipefish Dusky pipefish Northern pipefish Bay pipefish Chain pipefish Sargassum pipefish Gulf pipefish Bull pipefish	A A P A A A A A A A A P P A A A P A		orythoichthys albirostris Hecke whichthys brachycephalus (Poey) Permatostethus punctipinnis Giller Hippocampus erectus Perry Hippocampus obtusus Ginsburg ous zosterae Jordan and Gilbert Micrognathus crinitus (Jenyns Micrognathus crinitus (Jenyns Micrognathus vittatus (Kaup Micrognathus lineatus (Kaup Micrognathus and Evermann Syngnathus auliscus (Swain Syngnathus dunckeri Metzelaan Syngnathus dunckeri Metzelaan Syngnathus dunckeri Metzelaan Syngnathus griseolineatus Ayres Syngnathus griseolineatus Ayres Syngnathus louisianae Günther Syngnathus pelagicus Linnaeus ovelli (Evermann and Kendall) Syngnathus springeri Herald
Order	Lamprid	offormes (Allotrice	gnathi)
	Lam	prididae—opahs	

COMMON NAME	OCCURRENCE	SCIENTIFIC NAME		
	Stylephoridae—tube-e	eyes		
Tube-eye	A	Stylephorus chordatus Shaw		
	Lophotidae—crestfish	nes		
Crestfish	=	Lophotus capellei (Schlegel)		
	Regalecidae—oarfish	es		
Oarfish	-			
	Trachipteridae—ribbon	fishes		
Scalloped ribbonfish Polka-dot ribbonfish	A	Trachipterus arcticus (Brünnich) Trachipterus cristatus Bonelli Trachipterus polystictus Ogilby .Trachipterus trachypterus (Gmelin)		
	Order Beryciformes (Ber	RYCOIDEI)		
	Polymyxiidae—beardfi	shes		
Beardfish	A			
H	olocentridae—squirrelfishes an	d soldierfishes		
Squirrelfish	A			
	Order Percopsiformes (Sai	LMOPERCAE)		
	Percopsidae—trout-per	rches		
Trout-perchSand roller	F F	. Percopsis omiscomaycus (Walbaum) Percopsis transmontana (Eigenmann and Eigenmann)		
	Aphredoderidae—pirate p	perches		
Pirate perch	F	A phredoderus sayanus (Gilliams)		
Order Zeiformes (Zeomorphi)				
	Zeidae—dories			
American John Dory	A	Zenopsis ocellata (Storer)		
Caproidae—boarfishes				
Deepbody boarfish Shortspine boarfish	A			
Order Perciformes (Percomorphi; Acanthopterygii)				
	Centropomidae—snoc	oks		
Swordspine snook Little snook	A			

COMMON NAME	OCCURE	RENCE SCIENTIFIC NAME
Tarpon snook	A	Centropomus pectinatus Poey
Snook	A	
	Serra	anidae¹—sea basses
Mutton hamlet	A	
Crimson bass		Anthias asperilinguis Günthe
Southern sea bass		
Bank sea bass		Centropristes ocyurus (Jordan and Evermann
Rock sea bass		
Black sea bass		
Coney		
Marbled grouper		Dermatolepis inermis (Valenciennes
Dwarf sand perch	A	
Sand perch	A	
Rock hind	A	Epinephelus adscensionis (Osbeck
Spotted cabrilla	P	Epinephelus analogus Gi
Speckled hind		Epinephelus drummondhayi Goode and Bea
Yellowedge grouper	A	
Red hind	A	
Jewfish	A	
Red grouper		
Warsaw grouper	A	
Snowy grouper	A	
Nassau grouper	A	
Spanish flag	A	
Longtail bass	A	
Splittail bass	P	
Red barbier	A	
Butter hamlet	A	
Black grouper		
Culf grouper	P	Mycteroperca jordani (Jenkins and Evermann
Gulf grouper	A	Mycteroperca microlepis (Goode and Bean
Gag		
Scamp		
Tiger grouper	A	Master of percent tights (Valenciennes
Yellowfin grouper	A	
Broomtail grouper	P	Occarthing martinism is (Cylishaus)
Roughtongue bass	A	Ocyanthias martinicensis (Guichenot
Blackear bass		
Kelp bass	P	
Spotted sand bass	P	Paralabrax maculatofasciatus (Steindachner
Sand bass		
Creole-fish		
Graysby	A	
Yellowtail bass	A	
Wreckfish	A	Polyprion americanus (Bloch and Schneider
Orangeback bass	A	
Lantern bass	A	Prionodes baldwini Evermann and Mars
Saddle bass		
Tattler	A	
Streamer bass	A	
Reef bass	A	
White perch	A T	F Roccus americanus (Gmelir

¹ In addition to the species listed, two are sufficiently important in the sport fishery near our area off Florida to warrant mention: misty grouper, *Epinephelus mystacinus* (Poey); yellowmouth grouper *Mycteroperca interstitialis* (Poey).

COMMON NAME	OCCURRENCE	SCIENTIFIC NAME
White bass. Yellow bass. Striped bass. Freckled soapfish. Soapfish. Spotted soapfish. Belted sandfish. Pygmy sea bass. Chalk bass. Giant sea bass.	F Roccus mississip A-F-P	Roccus chrysops (Rafinesque) piensis (Jordan and Eigenmann)Roccus saxatilis (Walbaum)Rypticus arenatus Cuvier aponaceus (Bloch and Schneider)Rypticus subbifrenatus (Gill)Serranellus subligarius (Cope)Serraniculus pumilio GinsburgSerranus tortugarum LongleyStereolepis gigas Ayres
	Lobotidae—tripletails	
Tripletail	A	Lobotes surinamensis (Bloch)
	Lutjanidae—snappers	
Black snapper Queen snapper Mutton snapper Schoolmaster Red snapper Blackfin snapper Caribbean red snapper	A	A psilus dentatus Guichenot Etelis oculatus (Valenciennes) Lutjanus analis (Cuvier) Lutjanus apodus (Walbaum) janus blackfordi Goode and Bean Lutjanus buccanella (Cuvier) Lutjanus campechanus (Poey)
Cubera snapper Gray snapper Dog snapper Mahogany snapper Lane snapper Silk snapper Yellowtail snapper Wenchman Vermilion snapper	A	Lutjanus cyanopterus (Cuvier) Lutjanus griseus (Linnaeus) janus jocu (Bloch and Schneider) Lutjanus mahogoni (Cuvier) Lutjanus synagris (Linnaeus) Lutjanus vivanus (Cuvier) Ocyurus chrysurus (Bloch) Pristipomoides andersoni Ginsburg Rhomboplites aurorubens (Cuvier)
	Priacanthidae—bigeyes	
Bigeye Glasseye snapper Short bigeye Popeye catalufa	A	Priacanthus arenatus Cuvier Priacanthus cruentatus (Lacépède) Pristigenys alta (Gill) Pristigenys serrula (Gilbert)
Bronze cardinalfish Bridle cardinalfish Barred cardinalfish Freckled cardinalfish Whitestar cardinalfish Flamefish Dusky cardinalfish Pale cardinalfish Twospot cardinalfish Sawcheek cardinalfish Conchfish Belted cardinalfish	A	Apogon alutus Jordan and Gilbert Apogon aurolineatus (Mowbray)

COMMON NAME OCCURRENCE SCIENTIFIC NAME

Centrarchidae—sunfishes Mud sunfish..... Roanoke bass..... Rock bass..... F Archoplites interruptus (Girard) Sacramento perch..... Flier FElassoma evergladei Jordan F Everglades pygmy sunfish..... Okefenokee pygmy sunfish \mathbf{F} Elassoma okefenokee Böhlke Banded pygmy sunfish..... F Blackbanded sunfish..... F Enneacanthus chaetodon (Baird) \mathbf{F}Enneacanthus gloriosus (Holbrook) Bluespotted sunfish...... Enneacanthus obesus (Girard) Banded sunfish..... \mathbf{F} Lepomis auritus (Linnaeus) Redbreast sunfish..... Lepomis cyanellus Rafinesque Green sunfish..... FLepomis gibbosus (Linnaeus) Pumpkinseed..... F Orangespotted sunfish..... FLepomis humilis (Girard) Lepomis macrochirus Rafinesque F Bluegill..... Lepomis marginatus (Holbrook) Longear sunfish..... F Lepomis microlophus (Günther) Redear sunfish..... Lepomis punctatus (Valenciennes) Spotted sunfish..... Lepomis symmetricus Forbes Bantam sunfish..... Redeye bass..... \mathbf{F} Micropterus dolomicui Lacépède F Smallmouth bass..... Micropterus notius Bailey and Hubbs F Suwannee bass..... Micropterus punctulatus (Rafinesque) Spotted bass..... F Micropterus salmoides (Lacépède) Largemouth bass..... Micropterus treculi (Vaillant and Bocourt) F Guadalupe bass..... White crappie..... F Black crappie..... Percidae—perches Crystal darter..... Naked sand darter..... F F Western sand darter..... \mathbf{F} Eastern sand darter...... F Etheostoma acuticeps Bailey F Mud darter..... F Etheostoma asprigene (Forbes)Etheostoma atripinne (Jordan) F Cumberland snubnose darter F Etheostoma barratti (Holbrook) Scalyhead darter..... Etheostoma blennioides Rafinesque Greenside darter..... F Blenny darter......... F Etheostoma blennius Gilbert and Swain Etheostoma caeruleum Storer Rainbow darter........ Bluebreast darter..... Etheostoma camurum (Cope)Etheostoma chlorosomum (Hay) F Bluntnose darter..... F Etheostoma cinereum Storer Ashy darter..... Carolina darter....... Etheostoma collis (Hubbs and Cannon) Etheostoma coosae (Fowler) Coosa darter..... F Arkansas darter..... F Etheostoma cragini Gilbert

..... Etheostoma duryi Henshall

Blackside snubnose darter.....

COMMON NAME

OCCURRENCE

SCIENTIFIC NAME

COMMON NAME OCC	CURRE	INCE	SCIENTIFIC NAME
Brown darter	\mathbf{F}	Etheostoma ed	dwini (Hubbs and Cannon)
Arkansas saddled darter	\mathbf{F}	Etheostoma e	uzonum (Hubbs and Black)
Iowa darter	$ m \dot{F}$		Etheostoma exile (Girard)
Fantail darter	$\tilde{\mathbf{F}}$		ostoma flabellare Rafinesque
Fountain darter	$\hat{\mathbf{F}}$	Etheostoma for	aticola (Jordan and Gilbert)
Savannah darter	$\hat{\mathbf{F}}$	Etheo	stoma fricksium Hildebrand
Swamp darter	$\mathbf{\tilde{F}}$	Et	heostoma fusiforme (Girard)
Slough darter	$\mathbf{\tilde{F}}$		Etheostoma gracile (Girard)
Rio Grande darter	$\dot{\mathbf{F}}$	F	theostoma grahami (Girard)
Tuckasegee darter	F		ostoma gutselli (Hildebrand)
Harlequin darter	$\ddot{\mathrm{F}}$	Etheostomo	histrio Jordan and Gilbert
Turquoise darter	\mathbf{F}		otum (Jordan and Brayton)
Blueside darter	$\ddot{\mathrm{F}}$	Etheostoma in	ssiae (Jordan and Brayton)
Greenbreast darter	$\ddot{\mathrm{F}}$. Etheostoma jordani Gilbert
Yoke darter	\mathbf{F}		Etheostoma juliae Meek
Kanawha darter	$\ddot{\mathbf{F}}$	F_{t}	heostoma kanawhae (Raney)
	$^{ m F}$	Fthe	ostoma kennicotti (Putnam)
Stripetail darterGreenthroat darter	$\overset{\mathbf{F}}{\mathbf{F}}$	Ftheostoma	depidum (Baird and Girard)
Longfin darter	\mathbf{F}		costoma longimanum Jordan
Padhand darter	$\overset{\mathbf{r}}{\mathbf{F}}$	Ftheoetoma luteon	vinctum Gilbert and Swain
Redband darter	\mathbf{F}	Fth	ostoma maculatum Kirtland
Spotted darter	$\ddot{\mathbf{F}}$		Etheostoma mariae (Fowler)
T and down	$\overset{\mathbf{r}}{\mathrm{F}}$	Etheostoma mie	croperca Jordan and Gilbert
Least darter	$\overset{\mathbf{F}}{\mathrm{F}}$	Ftheostoma	nianguae Gilbert and Meek
Niangua darter	$\dot{\mathrm{F}}$	Fil	neostoma nigrum Rafinesque
Barcheek darter	\mathbf{F}		Etheostoma obeyense Kirsch
Finescale saddled darter	F	Etheoetoma ochu	rni (Hubbs and Trautman)
Goldstripe darter	$\ddot{\mathrm{F}}$	Etheostoma no	ervipinne Gilbert and Swain
Waccamaw darter	$\dot{\mathbf{F}}$	Etheostoma per	Longum (Hubbs and Raney)
Riverweed darter	${f ilde{F}}$	Etheostoma nodo.	stemone Jordan and Jenkins
Cypress darter	F		Etheostoma proeliare (Hay)
Stippled darter	$ar{ ext{F}}$	Etheost	oma punctulatum (Agassiz)
Orangebelly darter	$ar{\mathbf{F}}$	Etheostoma re	diosum (Hubbs and Black)
Redline darter	$\overline{\mathbf{F}}$	$\dots \dots Eth$	eostoma rufilineatum (Cope)
Rock darter	\mathbf{F}	Etheostoma	rupestre Gilbert and Swain
Arrow darter	\mathbf{F}	Etheostoma	sagitta (Jordan and Swain)
Saluda darter	\mathbf{F}	Etheostoma so	dudae (Hubbs and Cannon)
Maryland darter	\mathbf{F}	Etheostoma se	ellare (Radcliffe and Welch)
Sawcheek darter	\mathbf{F}	Etheostoma serri	ferum (Hubbs and Cannon)
Tennessee snubnose darter	\mathbf{F}		theostoma simoterum (Cope)
Orangethroat darter	\mathbf{F}	$\dots \dots Eth$	neostoma spectabile (Agassiz)
Spottail darter	\mathbf{F}	$\dots \dots Et$	heostoma squamiceps Jordan
Speckled darter	\mathbf{F}	Eth	eostoma stigmaeum (Jordan)
Gulf darter	\mathbf{F}		Etheostoma swaini (Jordan)
Swannanoa darter	\mathbf{F}		anoa Jordan and Evermann
Missouri saddled darter	\mathbf{F}	$\dots Etheostoma$ tetr	azonum (Hubbs and Black)
Seagreen darter	\mathbf{F}	\dots Etheostoma thalassi	num (Jordan and Brayton)
Tippecanoe darter	\mathbf{F}	\dots Etheostoma tippec	anoe Jordan and Evermann
Tuscumbia darter	\mathbf{F}	Etheostoma_tr	uscumbia Gilbert and Swain
Variegate darter	\mathbf{F}		theostoma variatum Kirtland
Striped darter	\mathbf{F}	$\ldots \ldots E$	theostoma virgatum (Jordan)
Glassy darter	F		Etheostoma vitreum (Cope)
Redfin darter	F		theostoma whipplei (Girard)
Banded darter	\mathbf{F}		Etheostoma zonale (Cope)

COMMON NAME	CCURRENCE	SCIENTIFIC NAME		
Blackline tilefish	F F P P P P P P P P P P P P P P P P P P			
TilefishSand tilefish	. ALophol	atilus chamaeleonticeps Goode and Bean Malacanthus plumieri (Bloch)		
	Pomatomidae—blue	fishes		
Bluefish	. A	Pomatomus saltatrix (Linnaeus)		
	Rachycentridae—	cobias		
Cobia	. A	Rachycentron canadum (Linnaeus)		
Carangidae¹—jacks, scads, and pompanos				
African pompano Yellow jack Green jack Blue runner Crevalle jack Horse-eye jack Bar jack Bumper Mexican scad Mackerel scad Round scad	. A			

¹ An important sport fish, the black jack, Caranz lugubris Poey, occurs just out of our area and is landed at Florida por

COMMON NAME O	CCURRENCE	SCIENTIFIC NAME
Rainbow runner Bluntnose jack Pilotfish Roosterfish Leatherjacket Bigeye scad Lookdown Pacific amberjack Yellowtail Greater amberjack Almaco jack Lesser amberjack Banded rudderfish Pompano Permit Palometa Palometa Paloma pompano Gafftopsail pompano Rough scad Jack mackerel Cottonmouth jack Pacific moonfish	A Hemico A-P P A-P Oligoplites A Sei A P B Seriola col C P A A A Tra C Tra	Nematistius pectoralis Gill saurus (Bloch and Schneider) lar crumenophthalmus (Bloch) Selene vomer (Linnaeus) lburni (Evermann and Clark) Seriola dorsalis (Gill) Seriola dumerili (Risso) Seriola falcata Valenciennes Seriola fasciata (Bloch) Seriola zonata (Mitchill) uchinotus carolinus (Linnaeus) rachinotus falcatus (Linnaeus) Trachinotus paitensis Cuvier Trachinotus paitensis Cuvier Trachinotus rhodopus (Gill) Trachurus lathami Nichols drachurus symmetricus (Ayres) Uraspis heidi Fowler wifrons Meek and Hildebrand
Atlantic moonfish	. A	Vomer setapinnis (Mitchill)
Pompano dolphin	. A-P	oryphaena hippurus LinnaeusBrama rayi (Bloch)
Bigscale pomfret		I aracies tongipinnis (Lowe)
Irish pompano. Striped mojarra. Spotfin mojarra. Silver jenny. Bigeye mojarra. Mottled mojarra. Flagfin mojarra. Slender mojarra. Yellowfin mojarra.	. A	isthostomus (Goode and Bean) . Diapterus plumieri (Cuvier) us argenteus Baird and Girard nus gula (Quoy and Gaimard) iucinostomus havana (Nichols) Eucinostomus lefroyi (Goode) stomus melanopterus (Bleeker) Eucinostomus pseudogula Poey Gerres cinereus (Walbaum)
	Pomadasyidae—grunts	
Sargo. Black margate. Porkfish. Tomtate. Smallmouth grunt. Barred grunt. Margate. Black grunt. Caesar grunt.	P Anisotre A Ani A Ani A Bath A Brachy A	emus davidsoni (Steindachner) sotremus surinamensis (Bloch) sotremus virginicus (Linnaeus) systoma aurolineatum (Cuvier) ygenys chrysargyrea (Günther)Conodon nobilis (Linnaeus)Haemulon album CuvierHaemulon bonariense CuvierHaemulon carbonarium Poey

COMMON NAME OO	CCURREN	NCE SCIENTIFIC NAME
French grunt Spanish grunt Cottonwick Sailors choice White grunt Bluestriped grunt Pigfish Burro grunt Salema	. A	
	Sciae	enidae—drums
Freshwater drum Silver perch Bairdiella Black croaker Sand seatrout Spotted seatrout White seabass Silver seatrout Shortfin corvina Weakfish Orangemouth corvina Cubbyu Jackknife-fish Striped drum Spotted drum White croaker Banded drum Spot Southern kingfish Minkfish Gulf kingfish Northern kingfish California corbina Atlantic croaker Reef croaker Reef croaker Black drum Spotfin croaker Red drum Spotfin croaker	A P A A A A A A A A A A A A A A A A A A	Aplodinotus grunniens Rafinesque Bairdiella icistius (Jordan and Gilbert) Cheilotrema saturnum (Girard) Cynoscion arenarius Ginsburg Cynoscion nebulosus (Cuvier) Cynoscion nobilis (Ayres) Cynoscion nothus (Holbrook) Cynoscion parvipinnis Ayres Cynoscion regalis (Bloch and Schneider) Cynoscion xanthulus Jordan and Gilbert Equetus acuminatus (Bloch and Schneider) Equetus lanceolatus (Linnaeus) Equetus pulcher (Steindachner) Equetus punctatus (Bloch and Schneider) Genyonemus lineatus (Ayres) Larimus fasciatus Holbrook Leiostomus xanthurus Lacépède Menticirrhus americanus (Linnaeus) Menticirrhus focaliger Ginsburg Menticirrhus focaliger Ginsburg Menticirrhus undulatus (Girard) Menticirrhus undulatus (Girard) Micropogon undulatus (Linnaeus) Odontoscion dentex (Cuvier) Ophioscion thompsoni (Hubbs) Pogonias cromis (Linnaeus) Roncador stearnsi (Steindachner) Sciaenops ocellata (Linnaeus) Scriphus politus Ayres Stellifer lanceolatus (Holbrook) Umbrina coroides Cuvier Umbrina roncador Jordan and Gilbert Vacuoqua sialis (Jordan and Eigenmann)
		dae—goatfishes
Yellow goatfish Red goatfish Mexican goatfish	. A . . A .	

¹ In our area confined to Salton Sea.

COMMON NAME O	CCURI	RENCE	SCIENTIFIC NAME
Spotted goatfish		Ps	seudupeneus maculatus (Bloch)
	Sr	paridae—porgies	
Sheepshead. Sea bream Grass porgy Jolthead porgy Pacific porgy Saucereye porgy Whitebone porgy Sheepshead porgy Littlehead porgy Silver porgy Spottail pinfish Pinfish Red porgy Longspine porgy Scup	. A . A . A . P . A . A . A . A . A	Archosarg Archos Archos Calamu Calamus be Calamu Calamus Calamus Calamus Dip	us probatoccphalus (Walbaum) sargus rhomboidalis (Linnaeus) us arctifrons Goode and Bean ajonado (Bloch and Schneider) mus brachysomus (Lockington) ulamus calamus (Valenciennes) leucosteus Jordan and Gilbert Calamus penna (Valenciennes) is proridens Jordan and Gilbert lodus argenteus (Valenciennes) Diplodus holbrooki (Bean) Lagodon rhomboides (Linnaeus) Pagrus sedecim Ginsburg Stenotomus caprinus Bean tenotomus chrysops (Linnaeus)
•		oheridae—sweepers	,
Glassy sweeper	_	·	omburgki Müller and Troschel
	Scor	pidae—halfmoons	
Halfmoon		-	a californiensis (Steindachner)
	Kypl	hosidae—sea chubs	
Zebra pereh Yellow chub Bermuda chub	. A		azurea Jenkins and Evermann Kyphosus incisor (Cuvier) Kyphosus scctatrix (Linnaeus)
	Gir	rellidae—nibblers	
Opaleye	. P		Girella nigricans (Ayres)
	Ephip	ppidae—spadefishes	
Atlantic spadefish	. A . P		actodipterus faber (Broussonet) actodipterus zonatus (Girard)
Cha	etodo	ontidae—butterflyfishes	S
Cherubfish Bank butterflyfish Foureye butterflyfish Spotfin butterflyfish Reef butterflyfish Banded butterflyfish Blue angelfish Queen angelfish Rock beauty French angelfish Gray angelfish Longsnout butterflyfish	. A . A . A . A . A . A . A		ge argi Woods and Kanazawa

COMMON NAME	OCCURRENCE	SCIENTIFIC NAME
	Cichlidae—cichlids	
Velvet eichlid		. Astronotus ocellatus (Agassiz) noguttatum (Baird and Girard)
	Embiotocidae—surfperches	
Barred surfperch Calico surfperch Redtail surfperch Kelp perch Shiner perch Island seaperch Black perch Striped seaperch Spotfin surfperch Walleye surfperch Rainbow seaperch Tule perch Reef perch Dwarf perch Sharpnose seaperch White seaperch Rubberlip seaperch Pile perch Pink seaperch	P	Amphistichus argenteus Agassiz Amphistichus koelzi (Hubbs) phistichus rhodoterus (Agassiz)Brachyistius frenatus Gill ymatogaster oggregata GibbonsCymatogaster gracilis TarpEmbiotoca jacksoni AgassizEmbiotoca lateralis AgassizHyperprosopon anale Agassiz erprosopon argenteum Gibbons prosopon ellipticum (Gibbons)Hypsurus caryi (Agassiz)Hypsurus caryi (Agassiz)Hysterocarpus traski Gibbons as aurora (Jordan and Gilbert) icrometrus minimus (Gibbons) n atripes (Jordan and Gilbert)Phanerodon furcatus GirardRhacochilus toxotes AgassizRhacochilus vacca (Girard) rosaceus (Jordan and Gilbert)
I	omacentridae—damselfishes	
Sergeant major Night sergeant Blue chromis Yellowtail reef-fish Gray reef-fish Brown chromis Blacksmith Dusky damselfish Beaugregory Bicolor damselfish Threespot damselfish Cocoa damselfish Garibaldi Yellowtail damselfish	A A Abudefduf A Chromis er A Chromis er A Chromis er A Chromis er A Eupomacentrus leue A Eupomacentrus leue A Eupomacentrus leue A Eupomacentrus leue	Abudefduf saxatilis (Linnaeus) f taurus (Müller and Troschel) Chromis cyanea (Poey) nchrysurus Jordan and Gilbert
Spotfin hogfish. Spanish hogfish Creole wrasse. Red hogfish. Dwarf wrasse. Greenband wrasse. Slippery dick. Painted wrasse. Yellowhead wrasse.	. A	Bodianus pulchellus (Poey)Bodianus rufus (Linnaeus) r parrai (Bloch and Schneider)Decodon puellaris (Poey) Doratonotus megalepis Günther athyphilus Beebe and Tee-VanHalichoeres bivittatus (Bloch)Halichoeres caudalis (Poey)

COMMON NAME	CCURRENCE	SCIENTIFIC NAME
Clown wrasse Blackear wrasse Puddingwife Rock wrasse Hogfish Señorita California sheephead Tautog Cunner Bluehead Rosy razorfish Pearly razorfish Green razorfish	. A	alichoeres maculipinna (Müller and Troschel) Halichoeres poeyi (Steindachner) Halichoeres radiatus (Linnaeus) Halichoeres semicinctus (Ayres) Lachnolaimus maximus (Walbaum) Oxyjulis californica (Günther) Pimelometopon pulchrum (Ayres) Tautoga onitis (Linnaeus) Tautogolabrus adspersus (Walbaum) Thalassoma bifasciatum (Bloch) Xyrichthys martinicensis Valenciennes Xyrichthys psittacus (Linnaeus) Xyrichthys ventralis Bean
	Scaridae—p	arrotfishes
Bluelip parrotfish Emerald parrotfish Purple parrotfish Blue parrotfish Striped parrotfish Rainbow parrotfish Queen parrotfish Redband parrotfish Redband parrotfish Spotfin parrotfish Redtail parrotfish Redfin parrotfish Stoplight parrotfish	A	
A	canthuridae-	-surgeonfishes
Ocean surgeon Doctorfish Blue tang Gulf surgeonfish	. A . A	
G	mpylidae—sı	ake mackerels
Snake mackerel Escolar	. A . A-P	
•	richiuridae—	cutlassfishes
Scabbardfish	. A	Lepidopus xantusi Goode and BeanTrichiurus lepturus LinnaeusTrichiurus nitens Garman
Scor	bridae—mac	kerels and tunas
Wahoo Frigate mackerel. Little tuna. Black skipjack. Skipjack tuna. Wavyback skipjack	. A	

COMMON NAME	OCCURE	RENCE	SCIENTIFIC NAME
Pacific bonito Striped bonito Atlantic bonito Chub mackerel. Pacific mackerel. Atlantic mackerel. King mackerel. Monterey Spanish mackerel. Spanish mackerel. Cero Albacore. Yellowfin tuna Blackfin tuna Bigeye tuna Bluefin tuna	A A P A A P A A A A-P A-P A-P A-P A-P	Sarda orienta Scomber Scombe Scombe Th	Sarda chiliensis (Cuvier) clis (Temminck and Schlegel)Sarda sarda (Bloch)Scomber colias Gmelin Scomber japonicus HouttuynScomber scombrus Linnaeus omberomorus cavalla (Cuvier) omorus concolor (Lockington) eromorus maculatus (Mitchill) scomberomorus regalis (Bloch) unnus alaiunga (Bonnaterre) unnus albacares (Bonnaterre)Thunnus obesus Lowe Thunnus thynnus (Linnaeus)
	Lu	varidae—louvars	,
Louvar	A-P		uvarus imperialis Rafinesque
	Istiop	horidae¹—billfishes	
Atlantic sailfish. White marlin. Striped marlin. Blue marlin. Shortbill spearfish. Longbill spearfish.	A P A P		stiophorus albicans (Latreille)Makaira albida (Poey)Makaira audax (Phillipi) Makaira nigricans Lacépède apturus angustirostris Tanaka Tetrapturus belone Rafinesque
		iidae—swordfishes	
Swordfish	A-P		$\dots Xiphias\ gladius\ {\it Linnaeus}$
	Ele	otridae—sleepers	
Fat sleeper Spotted sleeper Spinycheek sleeper Emerald sleeper Masked sleeper Bigmouth sleeper Blue sleeper	F F A A		Dormitator maculatus (Bloch) picta Kner and Steindachner Eleotris pisonis (Gmelin) dis smaragdus (Valenciennes) conata Jordan and Thompson obiomorus dormitor Lacépède Ioglossus calliurus Bean
	Ge	obiidae—gobies	
River goby. Bearded goby. Notchtongue goby. Frillfin goby. White-eye goby. Arrow goby. Bridled goby. Bluespot goby. Neon goby. Tidewater goby.	A A A P-F A P	Barbulifer ceu Bat Bathygo Clevelar Cory	waous tajasica (Lichtenstein) thoecus (Jordan and Gilbert) hygobius curacao (Metzelaar) bius soporator (Valenciennes) Bollmannia jeannae Fowler dia ios (Jordan and Gilbert) phopterus glaucofraenum Gill Coryphopterus nicholsi (Bean) Elacatinus oceanops Jordan yclogobius newberryi (Girard)

¹ The following species, not yet recorded from our area, occur south of the California border in the Pacific: Pacific sailfish, *Istiophorus greyi* Jordan and Evermann; black marlin, *Makaira indica* (Cuvier); and blue marlin, *Makaira nigricans* Lacépède.

Sponge goby A Evermannichthys spongicola (Radelific Lyre goby A Evorthodus lyricus (Girard Tiger goby A Garmannia macrodon (Beebe and Tree-Van Longiaw mudsucker P-F Gillichthys mirabilis Coope Goldspot goby A Garmannia macrodon (Beebe and Tree-Van Cillichthys mirabilis Coope Goldspot goby A Garmannia macrodon (Beebe and Tree-Van Cillichthys mirabilis Coope Goldspot goby A Gobiondes bronssonneit Lacepture goby A Gobiondes bronssonneit Lacepture goby A Gobiondellus gracillimus Ginsebur Sharptail goby A Gobionellus boleosoma (Jordan and Gilbert Longtail goby A Gobionellus sactutus Girar Longtail goby P Gobionellus longicaudus (Jeukins and Evermann Highfin goby A Gobionellus sharadatus Girar Longtail goby A Gobionellus sharadatus Girar Longtail goby A Gobionellus sharada (Valenciennes Marked goby A Gobionellus shuffallus Sceanicas (Pellus Freshwater goby A Gobionellus shuffallus (Valenciennes Marked goby A Gobionellus shuffallus (Poet Spottail goby A Gobiosoma bosci (Laceptele Spottail goby A Gobiosoma bosci (Laceptele Whiteline goby A Gobiosoma phosci (Laceptele Whiteline goby A Gobiosoma horsti Metzelaa Twoscale goby A Gobiosoma horsti Metzelaa Twoscale goby A Gobiosoma horsti Metzelaa Twoscale goby A Gobiosoma longium Nichol Code goby A Gobiosoma longium Nichol Code goby A Gobiosoma longium Sichol Code goby A Gobiosoma robustum Ginsbur Paleback goby A Gobiosoma robustum Ginsbur Cheekspot goby P Ilymus gilberti (Digenmann and Eigenmann Bay goby P Lethops connectens Hubb Crested goby A Lophogobius cipidus (Ginsbur Crested goby A Microgobius cipidus (Ginsbur Greet goby A Microgobius cipidus (Ginsbur Greet goby A Microgobius complexis Lindichem Microdesmidae—wormfishes A Microgobius and Steinbur Gode and Beat Rong goby A Microgobius and Steinbur Gode and Beat Rong goby A Microgobius depidus (Ginsbur Gode and Beat Highfins corpionifish A Scorpaena aleantea Nicholos and Beat Goosehead scorpionfish A Scorpaena aleantea (Gode and Beat Longfin scorpionfish A Scorpaena aleanta Gode and Beat Gode and Gode and Beat Longfin	COMMON NAME O	CCURRENCE	SCIENTIFIC NAME
Lyre goby A Garmannia macrodon (Beebe and Tee-Van Longjaw mudsucker P-F Gillichthys mirabilis Coope Goldspot goby A Garmannia macrodon (Beebe and Tee-Van Longjaw mudsucker P-F Gillichthys mirabilis Coope Goldspot goby A Goloidels broussonnet I Lacépèd Darter goby A Goloidels broussonnet I Lacépèd Darter goby A Goloidellus boleosoma (Jordan and Gilbert Longtail goby A Goloidellus boleosoma (Jordan and Gilbert Longtail goby A Goloidellus paraellimus Ginsburg Sharptail goby A Goloidellus suraellimus Ginsburg Longtail goby P Goloidellus longicaudus (Jenkins and Evermann Highfin goby A Goloidellus sidellus sidellus Girart Emerald goby A Goloidellus sidellus sidellus sidellus Girart Emerald goby A Goloidellus sidellus sidellus sidellus (Jordan and Evermann Highfin goby A Goloidellus sidellus sidellus (Sepos Spottail goby A Goloidellus sidellus sidellus (Sepos Spottail goby A Goloidellus sidellus sidellus (Sepos Marked goby A Goloidellus sidellus sidellus (Sepos Marked goby A Goloidellus sidellus sidellus (Sepos Spottail goby A Goloidellus sidellus sidellus (Sepos Marked goby A Goloidellus sidellus sidellus (Sepos Marked goby A Goloidellus sidellus sidellus (Sepos Spottail goby A Goloidellus sidellus (Sepos Spottail goby A Goloidellus sidellus (Sepos Seaboard goby A Goloidellus sidellus si	Spange goby	A Evermann	ichthus sponaicola (Radeliffe)
Tiger goby. A Garmannia macrodon (Beebe and Tee-Van Longjaw mudsucker. PF Gillichthys mirabilis Coope Goldspot goby. A Gobionellus goby SA Gobionellus botossom eti Laceped Darter goby. A Gobionellus botossom (Jordan and Gilbert Slim goby. A Gobionellus botossom (Jordan and Gilbert Slim goby. A Gobionellus gracillimus Ginsbur Longtail goby. A Gobionellus longicaudus (Jenkins and Evermann Highfin goby. A Gobionellus shufeldti (Jordan and Evermann Freshwater goby. A Gobionellus smaragdus (Valenciennes Marked goby. A Gobionellus simpaturus (Goode and Bean Marked goby. A Gobionellus simpaturus (Goode and Bean Marked goby. A Gobionellus stigmaturus (Goode and Bean Naked goby. A Gobionellus stigmaturus (Goode and Bean Naked goby. A Gobiosoma bosci (Lacépède Whiteline goby. A Gobiosoma pinsburgi Hidebrand and Schroede Whiteline goby. A Gobiosoma hongipala Ginsbur Orangespotted goby. A Gobiosoma hongipala Ginsbur Orangespotted goby. A Gobiosoma hongipala Ginsbur Orangespotted goby. A Gobiosoma hongipala Ginsbur Paleback goby. A Gobiosoma hongipala			
Longjaw mudsucker Goldspot goby A Gobionellus boteosoma (Jordan and Gilbert Slim goby A Gobionellus boteosoma (Jordan and Gilbert Longtail goby A Gobionellus gobionellus hastatus Girar Longtail goby A Gobionellus gobionellus hastatus Girar Longtail goby A Gobionellus subrest Longtail goby A Gobionellus subretail Longtail goby A Longtail goby A Gobionellus subretail Longtail goby A Longtail g			acrodon (Beebe and Tee-Van)
Goldspot goby A Gobionellus boleosoma (Jordan and Gilbert Violet goby A Gobionellus boleosoma (Jordan and Gilbert Slim goby A Gobionellus boleosoma (Jordan and Gilbert Slim goby A Gobionellus gracillusus Ginsbur Sharptail goby A Gobionellus longicaudus (Jenkins and Evermann Highfin goby P Gobionellus longicaudus (Jenkins and Evermann Highfin goby A Gobionellus shufeldti (Jordan and Evermann Emerald goby A Gobionellus shufeldti (Jordan and Evermann Emerald goby A Gobionellus shufeldti (Jordan and Evermann Emerald goby A Gobionellus shufeldti (Jordan and Evermann Marked goby A Gobionellus stigmaturus (Goode and Bean Naked goby A Gobiosoma bosci (Lacépède Seaboard goby A Gobiosoma bosci (Lacépède Seaboard goby A Gobiosoma bosci (Lacépède Seaboard goby A Gobiosoma horsti Metzelau Twoscale goby A Gobiosoma horsti Metzelau Twoscale goby A Gobiosoma longinala Ginsbur Orangespotted goby A Gobiosoma longinala Ginsbur Orangespotted goby A Gobiosoma longinala Ginsbur Orangespotted goby A Gobiosoma robustum Ginsbur Paleback goby A Gobiosoma robustum Ginsbur Paleback goby A Gobiosoma robustum Ginsbur Paleback goby P Hyppus gilberti (Eigenmann and Eigenmann Bay goby P Lephdogobius lepidus (Girard Halfblind goby P Lephdogobius eprinoidus (Girard Halfblind goby P Lephdogobius eprinoidus (Girard Halfblind goby P Lephdogobius eprinoidus (Girard Palmanded goby P Lythrypnus adlii (Gilbert Zebra goby A Microgobius microlepis Longley and Hildebran Smallmouth goby A Microgobius subassinus (Jordan and Gilbert Seminole goby A Microgobius thalassinus (Jordan and Gilbert Seminole goby A Microgobius subassinus (Gordan and Gilbert Seminole goby A Microdesmus longipinnis (Weymouth Seorpaenidae—scorpionfish A Microdesmus longipinnis (Weymouth Seorpaenidae—scorpionfish A Pontinus valhumi Goode and Bea Highfin scorpionfish A Pontinus valhumi Goode and Bea Red scorpionfish A Scorpaena allantica Nichols and Bred Red scorpionfish A Scorpaena bergi Evermann and Marsl Barbfish A Scorpaena allantica Nichols and Hidebran Smoothhead scorpionfish A Sco	Langian mudeueker		Gillichthus mirabilis Copper
Violet goby A Gobiosoma (Jordan and Gilbert Slim goby A Gobionellus boleosoma (Jordan and Gilbert Slim goby A Gobionellus boleosoma (Jordan and Gilbert Slim goby A Gobionellus gracillimus Ginsburg Sharptail goby P Gobionellus longicaudus (Jenkins and Evermann Longtail goby P Gobionellus shufeldit (Jordan and Evermann Freshwater goby A-F Gobionellus shufeldit (Jordan and Evermann Emerald goby A Gobionellus shufeldit (Jordan and Evermann Emerald goby A Gobionellus shufeldit (Jordan and Evermann Sharked goby A Gobionellus shufeldit (Jordan and Evermann Sharked goby A Gobionellus shufeldit (Jordan and Bean Naked goby A Gobionellus shufeldit (Jordan and Bean Naked goby A Gobiosoma bosci (Lacépède Seaboard goby A Gobiosoma bosci (Lacépède Seaboard goby A Gobiosoma bosci (Lacépède Seaboard goby A Gobiosoma fongipala Ginsbur Toxangespotted goby A Gobiosoma longipala Ginsbur Orangespotted goby A Gobiosoma longipala Ginsbur Coale goby A Gobiosoma longipala Ginsbur Coale goby A Gobiosoma longipala Ginsbur Paleback goby A Gobiosoma robustum Ginsbur Paleback goby A Gobiosoma robustum Ginsbur Paleback goby P Hyprus gilberti (Eigenmann and Eigenmann Bay goby P Lephogobius myersi Ginsbur Paleback goby P Lephogobius carries Hubb Crested goby P Lephogobius cyprinoides (Pallas Bluebanded goby P Lephogobius cyprinoides (Pallas Bluebanded goby P Lythrypnus schra (Gilbert Sehanole goby A Microgobius microlepis Longley and Hildebrand Green goby A Microgobius microlepis Longley and Hildebrand Green goby A Microgobius shalassinus (Jordan and Gilbert Seninole goby A Microgobius shalassinus (Jordan and Gilbert Shadow goby P Quiettula y-cauda (Jankins and Evermann Smallmouth goby A Microgobius shalassinus (Jordan and Gilbert Shadow goby P Quiettula y-cauda (Jankins and Federmann Smallmouth goby A Microgobius shalassinus (Jordan and Gilbert Shadow goby P Quiettula y-cauda (Jankins and Goode and Bean Highfin scorpionfish A Pontinus longispinis Goode and Bean Red scorpionfish A Scorpaena algassiz Goode and Bean Red scorpionfish A Scorpaena a			Cuathologie thompsoni Jorden
Darter goby. A Gobionellus paraellimus Ginsburg Slim goby A Gobionellus paraellimus Ginsburg Sharptail goby A Gobionellus longicaudus (Jenkins and Evermann Highfin goby A Gobionellus longicaudus (Jenkins and Evermann Highfin goby A Gobionellus shufeldis (Jordan and Evermann Emerald goby A Gobionellus shufeldis (Jordan and Evermann Emerald goby A Gobionellus shufeldis (Jordan and Evermann Marked goby A Gobionellus stigmaticus (Poey Spottail goby A Gobionellus stigmaticus (Poey Spottail goby A Gobionellus stigmaticus (Poey Spottail goby A Gobiosoma borst interches Seaboard goby A Gobiosoma fonsti Metzelae Seaboard goby A Gobiosoma borst Metzelae Seaboard goby A Gobiosoma longipala Ginsbur Orangespotted goby A Gobiosoma longipala Ginsbur Orangespotted goby A Gobiosoma longipala Ginsbur Orangespotted goby A Gobiosoma longipala Ginsbur Paleback goby A Gobiosoma robustum Ginsbur Paleback goby A Gobiosoma robustum Ginsbur Paleback goby A Gobiosoma robustum Ginsbur Paleback goby P Hupnus gilberti (Eigenmann and Eigenmann Bay goby P Lepidogobius lepidus (Girard Halfblind goby P Lepidogobius geninoides (Pallae Seminole goby A Microgobius microlepis Longley and Hildebran Green goby A Microgobius microlepis Longley and Hildebran Shadow goby P Quietula y-cauda (Jenkins and Evermann Smallmouth goby A Microgobius thalassinus (Jordan and Gilbert Shadow goby P Typhlogobius californiensis Steindachne Microgobius thalassinus (Gordan and Gilbert Shadow goby A Microdesmus longipinnis (Weymouth Scorpaeniidae—scorpionfish A Microgobius acastor Poey Scalyhead scorpionfish A Microgobius acastic Foode and Bea Highfin scorpionfish A Pontinus rathburi Goode and Bea Goosehead scorpionfish A Scorpaena alganica Scorpaena despei Evermann and Marsl Barbfish A Scorpaena despei Evermann and Marsl Barbfish A Scorpaena despei Doode and Goode and Goosehead scorpionfis	Violet goby	Λ	
Slim goby	Dantan gaber	A Cobionellus be	
Sharptail goby A Gobionellus hastatus Girart Longtail goby P Gobionellus longicaudus (Jenkins and Evermann Highfin goby A Gobionellus cecanicus (Pallas Freshwater goby A-F Gobionellus shufeldti (Jordan and Evermann Emerald goby A Gobionellus shufeldti (Jordan and Evermann Emerald goby A Gobionellus shufeldti (Jordan and Evermann Rarked goby A Gobionellus stigmaticus (Poey Spottail goby A Gobionellus stigmaticus (Poey Naticus Gobionellus Spottail (Poet A Gobionellus Stigmaticus (Poet Poet A Gobionellus Spottail (Poet A Microgobius spottail (Poet A Microgobius Spottail (Poet A Microgobius Spottail (Poet Poet A Microgobius Spottail Poet A Microgobius Stalassinus (Dordanus (Longley Pink wormfish A Microdesmus Indonesmus Goode and Bear Microgobius Spottail Poet (Poet Poet A Microgobius Spottail Poet Poet (Poet Poet A Microgobius Spottail Poet Poet Poet Poet Poet Poet Poet Poet			
Longtial goby P Gobionellus longicaudus (Jenkins and Evermann Highfin goby A Gobionellus oceanicus (Pallas Freshwater goby A-F Gobionellus shufeldti (Jordan and Evermann Emerald goby A Gobionellus sigmaticus (Poey Spottail goby A Gobionellus stigmaticus (Poey Spottail goby A Gobionellus stigmaticus (Poey Spottail goby A Gobiosoma bosci (Lacépède Seaboard goby A Gobiosoma bosci (Lacépède Seaboard goby A Gobiosoma bosci (Lacépède Whiteline goby A Gobiosoma bosci (Lacépède Whiteline goby A Gobiosoma donquam Nichol Code goby A Gobiosoma longupala Ginsbur, Orangespotted goby A Gobiosoma robustum Ginsbur, Paleback goby A Gobiosoma robustum Ginsbur, Paleback goby A Gobiosoma longum Nichol Code goby A Gobiosoma longum Nichol Code goby A Gobiosoma robustum Ginsbur, Paleback goby A Gobiosoma robustum Ginsbur, Paleback goby A Gobiosoma robustum Ginsbur, Paleback goby A Lepidogobius lepidus (Cirard Halfblind goby P Lepidogobius lepidus (Cirard Halfblind goby P Lepidogobius expriroides (Pallas Bluebanded goby P Lythrypnus dalti (Gilbert Zebra goby A Microgobius microlepis Longley and Hildebrand Green goby A Microgobius microlepis Longley and Hildebrand Green goby A Microgobius thalassinus (Jordan and Gilbert Shadow goby P Quietula y-cauda (Jenkins and Evermann Graen goby A Microdesmus longipinnis (Weymouth Scapinycheek scorpionfish A Microdesmus longipinnis (Weymouth Scapinycheek scorpionfish A Microdesmus longipinnis Goode and Bear Highfin scorpionfish A Pontinus castor Poet Scalyhead scorpionfish A Pontinus longispinis Goode and Bear Longfin scorpionfish A Scorpaena adaptica Nichols and Brede Goosehead scorpionfish A Scorpaena adaptica Nichols and Brede Goosehead scorpionfish A Scorpaena delarata Goode and Bear Longfin scorpionfish A Scorpaena delarata Goode and Bear Hunchback	Silm goby	. A	Cobioselles bastatus Cineral
Highfin goby A- Gobionellus cecanicus (Pallas Freshwater goby A-F Gobionellus shufeldti (Jordan and Evermann Emerald goby A Gobionellus smaragdus (Valenciennes Marked goby A Gobionellus stigmaticus (Poey Spottail goby A Gobionellus stigmaturus (Goode and Bean Naked goby A Gobiosoma bosci (Lacépède Seaboard goby A Gobiosoma bosci (Lacépède Seaboard goby A Gobiosoma forsti Metzelaa Twoscale goby A Gobiosoma forsti Metzelaa Twoscale goby A Gobiosoma horsti Metzelaa Twoscale goby A Gobiosoma horsti Metzelaa Code goby A Gobiosoma longum Nichol Code goby A Gobiosoma longum Nichol Code goby A Gobiosoma longum Nichol Code goby A Gobiosoma horsti Mictola Repair (Eigenmann and Eigenmann Bay goby P Hupnus gilberti (Eigenmann and Eigenmann Bay goby P Lephogobius lepidus (Girard Halfblind goby P Lephogobius exprisios (Pallas Bluebanded goby P Lythrypnus dalti (Gilbert Zebra goby P Lythrypnus dalti (Gilbert Zebra goby A Microgobius acarri Fowle Clown goby A Microgobius thalassinus (Jordan and Gilbert Shadow goby P Quietula y-cauda (Jenkins and Evermann Smallmouth goby A Microgobius thalassinus (Jordan and Gilbert Shadow goby P Typhlogobius californiensis Steindachne Microdesmidae—wormfishes Pugjaw wormfish A Microdesmus longipinnis (Weymouth Seorpaenidae—scorpionfishes and rockfishes Blackbelly rosefish A Microdesmus longipinnis (Goode and Bean Highfin scorpionfish A Pontinus capionfish A Pontinus corpionfish A Pontinus corpionfish A Pontinus corpionfish A Pontinus corpionfish A Pontinus rathbuni Goode and Bean Longfin scorpionfish A Scorpaena adeantatica Nichols and Brede Goosehead scorpionfish A Scorpaena adeantatica Nichols and Brede Goosehead scorpionfish A Scorpaena atlantica Nichols and Brede Goosehead scorpionfish A Scorpaena atlantica Nichols and Brede Goosehead scorpionfish A Scorpaena dalearad Gode and Bean Hunchback scorpionf			
Freshwater goby A Gobionellus shufeldti (Jordan and Evermann Emerald goby A Gobionellus smaragdus (Valenciennes Marked goby A Gobionellus stigmaturus (Poey Spottail goby A Gobionellus stigmaturus (Goode and Bean Naked goby A Gobiosoma bosci (Lacépède Seaboard goby A Gobiosoma ginsburgi Hildebrand and Schroede Whiteline goby A Gobiosoma funsti Hildebrand and Schroede Whiteline goby A Gobiosoma longil Hildebrand and Schroede goby A Gobiosoma longil pala Ginsburg Orangespotted goby A Gobiosoma longum Nichol Code goby A Gobiosoma robustum Ginsburg Paleback goby A Gobiosoma robustum Ginsburg Cheekspot goby P Ilypnus gilberti (Eigenmann and Eigenmann Bay goby P Lepidogobius lepidus (Girard Halfblind goby P Lepidogobius lepidus (Girard Eversted goby A Lophogobius connectens Hubb Crested goby A Lophogobius connectens Hubb Crested goby P Lythrypnus dalli (Gilbert Schraug) P Lythrypnus dalli (Gilbert Schraug) A Microgobius carri Fowle Clown goby A Microgobius microlepis Longley and Hildebrand Green goby A Microgobius microlepis Longley and Hildebrand Green goby A Microgobius halassinus (Girard A Microgoby P Typhlogobius carri Fowle Clown goby P Quietula y-cauda (Jenkins and Evermann Smallmouth goby P Typhlogobius californiensis Steindachne Microdesmidae—wormfishes Pugjaw wormfish A Microdesmus floridanus (Longley Pink wormfish A Microdesmus longipinnis (Weymouth Scorpaenidae—scorpionfish A Neomerinthe pollux (Poey Longsnout scorpionfish A Pontinus ralbbuni Goode and Beai Highfin scorpionfish A Pontinus ralbbuni Goode and Beai Longfin scorpionfish A Scorpaena dagassizi Goode and Beai Longfin scorpionfish A Scorpaena dalantica Nichols and Brede Gooschead scorpionfish A Scorpaena dalantica Richols and Brede Gooschead scorpionfish A Scorpaena dagassizi Goode and Beai Longfin scorpionfish A Scorpaena dagassizi Goode and Beai Longfin scorpionfish A Scorpa			Cobionally organism (Poller)
Emerald goby A Gobionellus smaragdus (Valenciennes Spottail goby A Gobionellus stigmaticus (Poey Spottail goby A Gobionellus stigmaticus (Goode and Bean Naked goby A Gobiosoma bosci (Lacépède Seaboard goby A Gobiosoma ginsburgi Hildebrand and Schroede Whiteline goby A Gobiosoma ginsburgi Hildebrand and Schroede Whiteline goby A Gobiosoma longipala Ginsburg Orangespotted goby A Gobiosoma longipala Ginsburg Orangespotted goby A Gobiosoma longum Nichol Code goby A Gobiosoma longum Nichol Code goby A Gobiosoma longum Nichol Code goby A Gobiosoma robustum Ginsburg Paleback goby P Ilypnus gilberti (Eigenmann and Eigenmann Bay goby P Lepidogobius epidus (Girard Halfblind goby P Lethops connectens Hubb Crested goby A Lophogobius cyprinoides (Pallas Bluebanded goby P Lythrypnus dalli (Gilbert Zebra goby P Lythrypnus dalli (Gilbert Zebra goby P Lythrypnus zebra (Gilbert Zebra goby A Microgobius carri Fowle Clown goby A Microgobius gulosus (Girard Banner goby A Microgobius thalassinus (Jordan and Gilbert Shadow goby P Quietula y-cauda (Jenkins and Evermann Smallmouth goby A Microgobius thalassinus (Jordan and Gilbert Shadow goby P Quietula y-cauda (Jenkins and Evermann Smallmouth goby A Microdesmus floridanus (Longley Pink wormfish A Microdesmus longipinnis (Weymouth Scorpaenidae—scorpionfishes and rockfishes Blackbelly rosefish A Microdesmus longipinnis (Weymouth Scorpaenidae—scorpionfishes and rockfishes Blackbelly rosefish A Microdesmus longipinnis (Weymouth Scorpaenidae—scorpionfishes and rockfishes Blackbelly rosefish A Microdesmus longipinnis (Goode and Bear Longfin scorpionfish A Neomerinthe pollux (Poey Longsnout scorpionfish A Pontinus rahbuni Goode and Bear Red scorpionfish A Scorpaena adasticia Nichols and Bred Red scorpionfish A Scorpaena bergi Evermann and Marsl Barbfish A Scorpaena calearata Goode and Bear Red scorpionfish A Scorpaena calearata Goode and Bear Barbfish A Scorpaena calearata Goode and Bear Smoothhead scorpionfish A Scorpaena datantica Nichols and Bear Barbfish A Scorpaena calearata Goode an	Fighin goby		
Marked goby A Gobionellus stigmaticus (Poey Spottail goby A Gobionellus stigmaturus (Goode and Bean Naked goby A Gobiosoma bosci (Lacépède Seaboard goby A Gobiosoma bosci (Lacépède Seaboard goby A Gobiosoma posci (Lacépède Whiteline goby A Gobiosoma longipala Ginsbur Orangespotted goby A Gobiosoma longipala Ginsbur Orangespotted goby A Gobiosoma longipala Ginsbur Orangespotted goby A Gobiosoma longipala Ginsbur Paleback goby A Gobiosoma longipala Ginsbur Paleback goby A Gobiosoma longipala Ginsbur Paleback goby P Hypnus gilberti (Eigenmann and Eigenmann Bay goby P Lepidogobius lepidus (Girard Halfblind goby P Lepidogobius lepidus (Girard Halfblind goby P Lepidogobius lepidus (Girard Halfblind goby P Lepidogobius cyprinoides (Pallas Bluebanded goby P Lythrypnus zebra (Gilbert Zebra goby A Microgobius cyprinoides (Pallas Bluebanded goby P Lythrypnus zebra (Gilbert Zebra goby A Microgobius microlepis Longley and Hildebrane Green goby A Microgobius microlepis Longley and Hildebrane Green goby A Microgobius halassinus (Jordan and Gilbert Shadow goby P Quietula y-cauda (Jenkins and Evermann Smallmouth goby A Microgobius carri Fowle Blind goby P Typhlogobius californiensis Steindachne Microdesmidae—wormfishes Pugjaw wormfish A Microdesmus floridanus (Longley Pink wormfish A Microdesmus floridanus (Longley Longsnout scorpionfish A Microdesmus longipinnis (Weymouth Scorpaenidae—scorpionfishes and rockfishes Blackbelly rosefish A Microdesmus longipinnis (Goode and Beat Longfin scorpionfish A Pontinus ralbium Goode and Beat Longfin scorpionfish A Pontinus ralbium Goode and Beat Red scorpionfish A Scorpaena agassizi Goode and Beat Red scorpionfish A Scorpaena dalantica Nichols and Bred Goosehead scorpionfish A Scorpaena calcarata Goode and Beat Red scorpionfish A Scorpaena calcarata Goode and Beat Romann A Scorpaena calcarata Goode and Beat Romann A Scorpaena calcarata Goode and Beat Smoothhead scorpionfish A Scorpaena calcarata Goode and Beat Smoothhead scorpionfish A Scorpaena calcarata Goode and Beat Smoothhead scorpi			etati (Jordan and Evermann)
Spottail goby. A Gobionellus stigmaturus (Goode and Bean Seaboard goby. A Gobiosoma bosci (Lacépède Seaboard goby. A Gobiosoma bosci (Lacépède Whiteline goby. A Gobiosoma institution of Gobiosoma horsti Metzelaa Twoscale goby. A Gobiosoma longipala Ginsburr Orangespotted goby. A Gobiosoma longipala Ginsburr Orangespotted goby. A Gobiosoma robustum Ginsburr Paleback goby. P Huynus gilberti (Eigenmann and Eigenmann Bay goby. P Lepidogobius lepidus (Girard Halfblind goby. P Lepidogobius lepidus (Girard Halfblind goby. P Lepidogobius lepidus (Girard Halfblind goby. P Lepidogobius lepidus (Girard Beanded goby. P Lythrypnus dalli (Gilbert Zebra goby. P Lythrypnus dalli (Gilbert Zebra goby. P Lythrypnus zebra (Gilbert Seminole goby. A Microgobius microlepis Longley and Hildebran Green goby. A Microgobius microlepis Longley and Hildebran Green goby. A Microgobius shalassinus (Jordan and Gilbert Shadow goby. P Quietula y-cauda (Jenkins and Evermann Smallmouth goby. A Microgobius salassinus (Jordan and Gilbert Shadow goby. P Quietula y-cauda (Jenkins and Evermann Smallmouth goby. A Microdesmus longipinnis (Weymouth Wierodesmidae—wormfishes Pugjaw wormfish. A Microdesmus longipinnis (Weymouth Scorpaenidae—scorpionfishes and rockfishes Blackbelly rosefish. A Microdesmus longipinnis (Weymouth Scorpaenidae—scorpionfish. A Neomerinthe pollus (Poey Longsnout scorpionfish. A Neomerinthe pollus (Poey Longsnout scorpionfish. A Pontinus castor Poey Scalyhead scorpionfish. A Pontinus rahbuni Goode and Beal Registorpionfish. A Pontinus rahbuni Goode and Beal Registorpionfish. A Scorpaena agassizi Goode and Beal Registorpionfish. A Scorpaena bergi Evermann and Marsl Barbfish. A Scorpaena bergi Evermann and Marsl Barbfish. A Scorpaena calcarata Goode and Bean Smoothhead scorpionfish. A Scorpaena dalantica Nichols and Beal Rmothhead scorpionfish. A Scorpaena dalantica Nichols and Beal Rmothhead scorpi			
Naked goby. A Gobiosoma bosci (Lacépède Whiteline goby A Gobiosoma ginsburgi Hildebrand and Schroede Whiteline goby A Gobiosoma longinsburgi Hildebrand and Schroede Whiteline goby A Gobiosoma horsti Metzelaa Twoscale goby A Gobiosoma longipala Ginsburg Orangespotted goby A Gobiosoma robustum Ginsburg Paleback goby. A Gobiosoma robustum Ginsburg Paleback goby P Hypnus gilberti (Eigenmann and Eigenmann Bay goby P Lepidogobius lepidus (Girard Halfblind goby P Lethops connectens Hubb Crested goby A Lophogobius cyprinoides (Pallas Bluebanded goby P Lythrypnus dalli (Gilbert Zebra goby P Lythrypnus cebra (Gilbert Zebra goby P Lythrypnus cebra (Gilbert Zebra goby A Microgobius cyprinoides (Pallas Bluebanded goby P Lythrypnus cebra (Gilbert Zebra goby A Microgobius microlepis Longley and Hildebrand Banner goby A Microgobius microlepis Longley and Hildebrand Green goby A Microgobius thalassinus (Jordan and Gilbert Shadow goby P Queetula y-cauda (Jenkins and Evermann Smallmouth goby A Risor ruber (Rosén Blind goby P Typhlogobius californiensis Steindachne Microdesmidae—wormfishes Pugjaw wormfish A Microdesmus longipinnis (Weymouth Scorpaenidae—scorpionfishes and rockfishes Blackbelly rosefish A Microdesmus longipinnis (Weymouth Scorpaenidae—scorpionfish A Pontinus castor Poet Longsnout scorpionfish A Pontinus longispinnis Goode and Beat Highfin scorpionfish A Pontinus rathbumi Goode and Beat Highfin scorpionfish A Scorpaena agassizi Goode and Beat Highfin scorpionfish A Scorpaena bergi Evermann and Marsl Barbfish A Scorpaena dispar Longley and Hildebrand Hunchback scorpionfish A Scorpaena dispar Longley and Hildebrand		. A	iononeuus stigmaticus (Poey)
Seaboard goby. A Gobiosoma ginsburgi Hidebrand and Schroede Whiteline goby A Gobiosoma horsti Metzelaa Twoscale goby A Gobiosoma longipala Ginsbur Orangespotted goby A Gobiosoma longum Nichol Code goby A Gobiosoma longum Nichol Code goby A Gobiosoma robustum Ginsbur Paleback goby A Gobiosoma robustum Ginsbur Paleback goby A Gobiosoma robustum Ginsbur Cheekspot goby P Ilypnus gilberti (Eigenmann and Eigenmann Bay goby P Lepidogobius lepidus (Girard Halfblind goby P Lethops connectens Hubb Crested goby A Lophogobius cyprinoides (Pallas Bluebanded goby P Lythrypnus adali (Gilbert Schragoby P Lythrypnus adali (Gilbert Schragoby P Lythrypnus adali (Gilbert Schragoby A Microgobius carri Fowle Clown goby A Microgobius microlepis Longley and Hildebrane Green goby A Microgobius halassinus (Jordan and Gilbert Shadow goby P Quietula y-cauda (Jenkins and Evermann Smallmouth goby A Microgobius californiensis Steindachne Microdesmidae—wormfishes Pugjaw wormfish A Microdesmus floridanus (Longley Pink wormfish A Microdesmus longipinnis (Weymouth Scorpaenidae—scorpionfishes and rockfishes Blackbelly rosefish A Microgobius radiopinnis (Weymouth Scorpaenidae—scorpionfish A Pontinus castor Poe Longsnout scorpionfish A Pontinus rathbuni Goode and Bean Highfin scorpionfish A Pontinus rathbuni Goode and Bean Highfin scorpionfish A Scorpaena agassizi Goode and Bean Red scorpionfish A Scorpaena agassizi Goode and Bean Honghish A Scorpaena bergi Evermann and Marsl Barbfish A Scorpaena dispar Longley and Hildebrand Hunchback scorpionfish A Scorpaena dispar Longley and Hildebrand		. AGobionellus s	tigmaturus (Goode and Bean)
Whiteline goby A Gobiosoma horsti Metzelaa Twoscale goby A Gobiosoma longipala Ginsbur Orangespotted goby A Gobiosoma longipala Ginsbur Orangespotted goby A Gobiosoma robustum Ginsbur Paleback goby A Gobiosoma robustum Ginsbur Paleback goby P Ilypnus gilberti (Eigenmann and Eigenmann Bay goby P Ilypnus gilberti (Eigenmann and Eigenmann Halfblind goby P Lepidogobius lepidus (Girard Halfblind goby P Lethops connectens Hubb Crested goby A Lophogobius cyprinoides (Pallas Bluebanded goby P Lythrypnus adalti (Gilbert Zebra goby P Lythrypnus zebra (Gilbert Zebra goby P Lythrypnus zebra (Gilbert Zebra goby A Microgobius acarri Fowle Clown goby A Microgobius amicrolepis Longley and Hildebrane Green goby A Microgobius thalassinus (Jordan and Gilbert Shadow goby P Quietula y-cauda (Jenkins and Evermann Smallmouth goby A Microgobius californiensis Steindachne Microdesmidae—wormfishes Pugjaw wormfish A Microdesmus floridanus (Longley Pink wormfish A Microdesmus longipinnis (Weymouth Scorpaenidae—scorpionfishes and rockfishes Blackbelly rosefish A Microdesmus longipinnis (Weymouth Scorpaenidae—scorpionfish A Neomerinthe pollux (Poey Longsnout scorpionfish A Neomerinthe pollux (Poey Longsnout scorpionfish A Pontinus longispinis Goode and Bear Highfin scorpionfish A Pontinus rathbuni Goode and Bear Highfin scorpionfish A Scorpaena agassizi Goode and Bear Highfish A Scorpaena brasiliensis Cuvie Smoothhead scorpionfish A Scorpaena brasiliensis Cuvie Smoothhead scorpionfish A Scorpaena dalantica Nichols and Brade Goosehead scorpionfish A Scorpaena dalantica Nichols and Brade Hunchback scorpionfish A Scorpaena dalantica Nichols and Bear Hunchback scorpionfish A Scorpaena dalantica Nichols and Bear Hunchback scorpionfish A Scorpaena dalantica Nichols and Bear			Gobiosoma bosci (Lacépède)
Twoscale goby. A Gobiosoma longipala Ginsbur, Orangespotted goby. A Gobiosoma longum Nichol Code goby. A Gobiosoma longum Nichol Code goby. A Gobiosoma robustum Ginsbur, Paleback goby. A Gobiosoma robustum Ginsbur, Paleback goby. P Hlypnus gilberti (Eigenmann and Eigenmann Bay goby. P Lepidogobius lepidus (Girard Halfblind goby. P Lethops connectens Hubb Crested goby. A Lophogobius cyprinoides (Pallas Bluebanded goby. P Lythrypnus dalli (Gilbert Zebra goby. P Lythrypnus dalli (Gilbert Zebra goby. P Lythrypnus zebra (Gilbert Seninole goby. A Microgobius microgobius gulosus (Girard Banner goby. A Microgobius microgobius gulosus (Girard Banner goby. A Microgobius thalassinus) Jordan and Gilbert Shadow goby. P Quietula y-cauda (Jenkins and Evermann Smallmouth goby. A Microgobius thalassinus) Gordan and Gilbert Shadow goby. P Quietula y-cauda (Jenkins and Evermann Smallmouth goby. A Microdesmidae—wormfishes Pugjaw wormfish. A Microdesmus floridanus (Longley Pink wormfish. A Microdesmus longipinnis (Weymouth Scorpaenidae—scorpionfishes and rockfishes Blackbelly rosefish. A Helicolenus dactylopterus (De la Roche Spinycheek scorpionfish. A Microdesmus longipinnis (Weymouth Scorpaenidae—scorpionfishes and rockfishes Blackbelly rosefish. A Helicolenus dactylopterus (De la Roche Spinycheek scorpionfish. A Pontinus rathbuni Goode and Bear Highfin scorpionfish. A Pontinus rathbuni Goode and Bear Highfin scorpionfish. A Pontinus rathbuni Goode and Bear Red scorpionfish. A Pontinus rathbuni Goode and Bear Red scorpionfish. A Scorpaena agassizi Goode and Bear Red scorpionfish. A Scorpaena agassizi Goode and Bear Red scorpionfish. A Scorpaena bergi Evermann and Marsl Barbfish. A Scorpaena bergi Evermann and Marsl Barbfish. A Scorpaena dacarata Goode and Bear Romothhead scorpionfish. A Scorpaena dacarata Goode and Bear Romothhead scorpionfish. A Scorpaena dacarata Goode and Bear Romothhead scorpionfish. A Scorpaena dacarata Goode and Hildebranc Smoothhead scorpionfish. A Scorpaena dacarata Goode and Hildebranc Goode and Hilde			rgi Hildebrand and Schroeder
Orangespotted goby A Gobiosoma longum Nichol Code goby A Gobiosoma robustum Ginsbur Paleback goby A Gobulus myersi Ginsbur Cheekspot goby P Ilypnus gilberti (Eigenmann and Eigenmann Bay goby P Lepidogobius lepidus (Girard Halfblind goby P Lethogobius cyprinoides (Pallas Bluebanded goby P Lethogobius cyprinoides (Pallas Bluebanded goby P Lythrypnus zebra (Gilbert Zebra goby A Lophogobius zebra (Gilbert Seminole goby A Microgobius acuri Fowle Clown goby A Microgobius gulosus (Girard Banner goby A Microgobius microlepis Longley and Hildebran Green goby A Microgobius microlepis Longley and Hildebran Green goby A Microgobius silva and Gilbert Shadow goby P Quietula y-cauda (Jenkins and Evermann Smallmouth goby A Microgobius californiensis Steindachne Microdesmidae—wormfishes Pugjaw wormfish A Microdesmus floridanus (Longley Pink wormfish A Microdesmus longipinnis (Weymouth Scorpaenidae—scorpionfishes and rockfishes Blackbelly rosefish A Melciolenus dactylopterus (De la Roche Spinycheek scorpionfish A Neomerinthe pollux (Poey Longsnout scorpionfish A Pontinus longipinis Goode and Bear Highfin scorpionfish A Pontinus rathbuni Goode and Bear Highfin scorpionfish A Scorpaena agassizi Goode and Bear Red scorpionfish A Scorpaena agassizi Goode and Bear Red scorpionfish A Scorpaena alantica Nichols and Brede Goosehead scorpionfish A Scorpaena alantica Nichols and Brede Goosehead scorpionfish A Scorpaena dalantica Nichols and Hede Goosehead scorpionfish A Scorpaena dalantica Nichols and Hildebran Smoothhead scorpionfish A Scorpaena dalantica Nichols and Hildebran Coule Microgobius A Scorpaena dalantica Nichols and Hildebran Coule Microgobius A Scorpaena dalantica Nichols and Hildebran Coule Microgobius A Scorpaena dal	Whiteline goby		
Code goby A Gobiosoma robustum Ginsburg Paleback goby A Gobulus myersi Ginsburg Paleback goby P Hypnus gilberti (Eigenmann and Eigenmann Bay goby P Lepidogobius lepidus (Girard Halfblind goby P Lepidogobius lepidus (Girard Halfblind goby P Lethops connectens Hubb Crested goby A Lophogobius cyprinoides (Pallas Bluebanded goby P Lythrypnus dalli (Gilbert Zebra goby P Lythrypnus dalli (Gilbert Zebra goby P Lythrypnus zebra (Gilbert Zebra goby A Microgobius carri Fowle Clown goby A Microgobius microlepis Longley and Hildebran Green goby A Microgobius microlepis Longley and Hildebran Green goby A Microgobius microlepis Longley and Hildebran Green goby A Microgobius thalassinus (Jordan and Gilbert Shadow goby P Quietula y-cauda (Jenkins and Evermann Smallmouth goby A Microgobius californiensis Steindachne Microdesmidae—wormfishes Pugjaw wormfish A Microdesmus floridanus (Longley Pink wormfish A Microdesmus longipinnis (Weymouth Scorpaenidae—scorpionfishes and rockfishes Blackbelly rosefish A Helicolenus dactylopterus (De la Roche Spinycheek scorpionfish A Neomerinthe pollux (Poey Scalyhead scorpionfish A Pontinus longispinis Goode and Bear Longfin scorpionfish A Pontinus rathbuni Goode and Bear Longfin scorpionfish A Scorpaena adassizi Goode and Bear Longfin scorpionfish A Scorpaena bergi Evermann and Marsl Barbfish A Scorpaena bergi Evermann and Marsl Barbfish A Scorpaena dispar Longley and Hildebranc Smoothhead scorpionfish A Scorpaena dispar Longley and Hildebranc			
Paleback goby. A Gobulus myersi Ginsburg Cheekspot goby P Ilypnus gilberti (Eigenmann and Eigenmann Bay goby P Lepidogobius lepidus (Girard Halfblind goby P Lethops connectens Hubb Crested goby A Lophogobius cyprinoides (Pallas Bluebanded goby P Lythrypnus adalt (Gilbert Zebra goby P Lythrypnus zebra (Gilbert Seminole goby A Microgobius gulosus (Girard Banner goby A Microgobius gulosus (Girard Banner goby A Microgobius microlepis Longley and Hildebranc Green goby A Microgobius thalassinus (Jordan and Gilbert Shadow goby P Quietula y-cauda (Jenkins and Evermann Smallmouth goby A Microdesmus floridanus (Longley Blind goby P Typhlogobius californiensis Steindachne Microdesmidae—wormfishes Pugjaw wormfish A Microdesmus longipinnis (Weymouth Scorpaenidae—scorpionfishes and rockfishes Blackbelly rosefish A Microdesmus longipinnis (Weymouth Scorpaenidae scorpionfish A Pontinus castor Poe; Scalyhead scorpionfish A Pontinus longispinis Goode and Bear Highfin scorpionfish A Pontinus rathbuni Goode and Bear Red scorpionfish A Scorpaena adassizi Goode and Bear Red scorpionfish A Scorpaena bergi Evermann and Marsl Barbfish A Scorpaena calcarata Goode and Bear Hunchback scorpionfish A Scorpaena dispar Longley and Hildebranc Burdish A Scorpaena dispar Longley and Hildebranc		. A	Gobiosoma longum Nichols
Cheekspot goby P Ilypnus gilberti (Eigenmann and Eigenmann Bay goby P Lepidogobius lepidus (Girard Halfblind goby P Lethops connectens Hubb Crested goby A Lophogobius cyprinoides (Pallas Bluebanded goby P Lythrypnus dalli (Gilbert Zebra goby P Lythrypnus zebra (Gilbert Zebra goby P Lythrypnus zebra (Gilbert Zebra goby A Microgobius carri Fowle Clown goby A Microgobius gulosus (Girard Banner goby A Microgobius microlepis Longley and Hildebrand Green goby A Microgobius californiens and Evermann Smallmouth goby A Microdesmus gulosus (Girard Banner goby A Microdesmus goby Green goby A Microdesmus goby Blind goby P Microdesmidae—wormfishes Pugjaw wormfish A Microdesmus floridanus (Longley Pink wormfish A Microdesmus longipinnis (Weymouth Scorpaenidae—scorpionfishes and rockfishes Blackbelly rosefish A Microdesmus longipinnis (Weymouth Scorpaenidae—scorpionfishes and rockfishes Blackbelly rosefish A Microdesmus longipinnis (Weymouth Scorpaenidae—scorpionfish A Neomerinthe pollux (Poey Longsnout scorpionfish A Neomerinthe pollux (Poey Longsnout scorpionfish A Neomerinthe pollux (Poey Longsnout scorpionfish A Pontinus longispinis Goode and Bear Highfin scorpionfish A Scorpaena atlantica Nichols and Brede Goosehead scorpionfish A Scorpaena bergi Evermann and Marsl Barbfish A Scorpaena dispar Longley and Hildebrand Smoothhead scorpionfish A Scorpaena dispar Longley and Hildebrand Smoothhead scorpionfish A Scorpaena dispar Longley and Hildebrand	Code goby	. A	<i>Gobiosoma robustum</i> Ginsburg
Cheekspot goby P Ilypnus gilberti (Eigenmann and Eigenmann Bay goby P Lepidogobius (Girard Halfblind goby P Lepidogobius lepidus (Girard Lafblind goby P Lepidogobius connectens Hubb Crested goby A Lophogobius cyprinoides (Pallas Bluebanded goby P Lythrypnus dalli (Gilbert Zebra goby P Lythrypnus dalli (Gilbert Zebra goby P Lythrypnus dalli (Gilbert Zebra goby A Microgobius carri Fowle Clown goby A Microgobius gulosus (Girard Banner goby A Microgobius microlepis Longley and Hildebrand Green goby A Microgobius microlepis Longley and Hildebrand Green goby A Microgobius thalassinus (Jordan and Gilbert Shadow goby P Quietula y-cauda (Jenkins and Evermann Smallmouth goby A Microdesmidae—wormfishes Pugjaw wormfish A Microdesmis floridanus (Longley Pink wormfish A Microdesmis longipinnis (Weymouth Scorpaenidae—scorpionfishes and rockfishes Blackbelly rosefish A Microdesmus longipinnis (Weymouth Scorpaenidae—scorpionfishes and rockfishes Blackbelly rosefish A Microdesmus longipinnis (Weymouth Scorpaenidae—scorpionfishes and rockfishes Blackbelly rosefish A Microdesmus longipinnis (Weymouth Scorpaenidae—scorpionfish A Neomerinthe pollux (Poey Longsnout scorpionfish A Neomerinthe pollux (Poey Longsnout scorpionfish A Pontinus longispinis Goode and Bear Highfin scorpionfish A Scorpaena atlantica Nichols and Brede Goosehead scorpionfish A Scorpaena atlantica Nichols and Brede Goosehead scorpionfish A Scorpaena bergi Evermann and Marsl Barbfish A Scorpaena bergi Evermann and Marsl Barbfish A Scorpaena bergi Evermann and Marsl Barbfish A Scorpaena dispar Longley and Hildebrand Smoothhead scorpionfish A Scorpaena dispar Longley and Hildebrand Hunchback scorpionfish A Scorpaena dispar Longley and Hildebrand	Paleback goby		
Bay goby P Lepidogobius lepidus (Girard Halfblind goby P Lethops connectens Hubb Crested goby A Lophogobius cyprinoides (Pallas Bluebanded goby P Lythrypnus dalli (Gilbert Zebra goby P Lythrypnus zebra (Gilbert Zebra goby P Lythrypnus zebra (Gilbert Zebra goby A Microgobius carri Fowle Clown goby A Microgobius microlepis Longley and Hildebrane Green goby A Microgobius microlepis Longley and Hildebrane Green goby A Microgobius thalassinus (Jordan and Gilbert Shadow goby P Quietula y-cauda (Jenkins and Evermann Smallmouth goby A Risor ruber (Rosén Blind goby P Typhlogobius californiensis Steindachne Microdesmidae—wormfishes Pugjaw wormfish A Microdesmus floridanus (Longley Pink wormfish A Microdesmus longipinnis (Weymouth Scorpaenidae—scorpionfishes and rockfishes Blackbelly rosefish A Microdesmus dactylopterus (De la Roche Spinycheek scorpionfish A Neomerinthe pollux (Poey Longsnout scorpionfish A Neomerinthe pollux (Poey Longsnout scorpionfish A Pontinus castor Poey Scalyhead scorpionfish A Pontinus rathbuni Goode and Bean Highfin scorpionfish A Scorpaena agassizi Goode and Bean Red scorpionfish A Scorpaena bergi Evermann and Marsl Barbfish A Scorpaena dilantica Nichols and Beat Hunchback scorpionfish A Scorpaena dilapar Longley and Hildebrane Hunchback scorpionfish A Scorpaena dilapar Longley and Hildebrane	Cheekspot goby	. P Ilypnus gilberti	(Eigenmann and Eigenmann)
Halfblind goby P Lethops connectens Hubb Crested goby A Lophogobius cyprinoides (Pallas Bluebanded goby P Lythrypnus dalli (Gilbert Zebra goby P Lythrypnus zebra (Gilbert Seminole goby A Microgobius carri Fowle Clown goby A Microgobius microlepis Longley and Hildebranc Green goby A Microgobius microlepis Longley and Hildebranc Green goby A Microgobius thalassinus (Jordan and Gilbert Shadow goby P Quietula y-cauda (Jenkins and Evermann Smallmouth goby A Risor ruber (Rosén Blind goby P Typhlogobius californiensis Steindachne Microdesmidae—wormfishes Pugjaw wormfish A Microdesmus floridanus (Longley Pink wormfish A Microdesmus longipinnis (Weymouth Scorpaenidae—scorpionfishes and rockfishes Blackbelly rosefish A Helicolenus dactylopterus (De la Roche Spinycheek scorpionfish A Neomerinthe pollux (Poey Longsnout scorpionfish A Neomerinthe pollux (Poey Longsnout scorpionfish A Pontinus longipinis Goode and Beat Highfin scorpionfish A Pontinus rathbuni Goode and Beat Highfin scorpionfish A Scorpaena agassizi Goode and Beat Red scorpionfish A Scorpaena atlantica Nichols and Brede Goosehead scorpionfish A Scorpaena bergi Evermann and Marsl Barbfish A Scorpaena bergi Evermann and Marsl Barbfish A Scorpaena calcarata Goode and Beat Hunchback scorpionfish A Scorpaena dispar Longley and Hildebranc		. P	Lepidogobius lepidus (Girard)
Crested goby A Lophogobius cyprinoides (Pallas Bluebanded goby P Lythrypnus dalli (Gilbert Zebra goby P Lythrypnus zebra (Gilbert Seminole goby A Microgobius carri Fowle Clown goby A Microgobius gulosus (Girard Banner goby A Microgobius microlepis Longley and Hildebrand Green goby A Microgobius microlepis Longley and Hildebrand Green goby A Microgobius thalassinus (Jordan and Gilbert Shadow goby P Quietula y-cauda (Jenkins and Evermann Smallmouth goby A Risor ruber (Rosén Blind goby P Typhlogobius californiensis Steindachne Microdesmidae—wormfishes Pugjaw wormfish A Microdesmus floridanus (Longley Pink wormfish A Microdesmus longipinnis (Weymouth Scorpaenidae—scorpionfishes and rockfishes Blackbelly rosefish A Helicolenus dactylopterus (De la Roche Spinycheek scorpionfish A Neomerinthe pollux (Poey Longsnout scorpionfish A Neomerinthe pollux (Poey Longsnout scorpionfish A Pontinus castor Poey Scalyhead scorpionfish A Pontinus rathbuni Goode and Bear Highfin scorpionfish A Scorpaena agassizi Goode and Bear Red scorpionfish A Scorpaena agassizi Goode and Bear Red scorpionfish A Scorpaena bergi Evermann and Marsl Barbfish A Scorpaena bergi Evermann and Marsl Barbfish A Scorpaena bergi Evermann and Marsl Barbfish A Scorpaena dispar Longley and Hildebrand Hunchback scorpionfish A Scorpaena dispar Longley and Hildebrand Hunchback scorpionfish A Scorpaena dispar Longley and Hildebrand		. P	Lethops connectens Hubbs
Bluebanded goby P Lythrypnus dalli (Gilbert Zebra goby P Lythrypnus zebra (Gilbert Zebra goby P Lythrypnus zebra (Gilbert Seminole goby A Microgobius carri Fowle Clown goby A Microgobius microlepis Longley and Hildebrand Banner goby A Microgobius microlepis Longley and Hildebrand Green goby A Microgobius thalassinus (Jordan and Gilbert Shadow goby P Quietula y-cauda (Jenkins and Evermann Smallmouth goby A Risor ruber (Rosén Blind goby P Typhlogobius californiensis Steindachne Microdesmidae—wormfishes Pugjaw wormfish A Microdesmus floridanus (Longley Pink wormfish A Microdesmus longipinnis (Weymouth Scorpaenidae—scorpionfishes and rockfishes Blackbelly rosefish A Microdesmus longipinnis (Weymouth Scalyhead scorpionfish A Neomerinthe pollux (Poey Longsnout scorpionfish A Neomerinthe pollux (Poey Longsnout scorpionfish A Pontinus longispinis Goode and Bear Highfin scorpionfish A Scorpaena agassizi Goode and Bear Longfin scorpionfish A Scorpaena atlantica Nichols and Brede Goosehead scorpionfish A Scorpaena bergi Evermann and Marsl Barbfish A Scorpaena calcarata Goode and Bear Hunchback scorpionfish A Scorpaena dispar Longley and Hildebrand Hunchback scorpionfish A Scorpaena dispar Longley and Hildebrand Hunchback scorpionfish A Scorpaena dispar Longley and Hildebrand		. A	phogobius cyprinoides (Pallas)
Zebra goby. P Lythrypnus zebra (Gilbert Seminole goby. A Microgobius carri Fowle Clown goby. A Microgobius gulosus (Girard Banner goby. A Microgobius microlepis Longley and Hildebrane Green goby. A Microgobius microlepis Longley and Hildebrane Green goby. A Microgobius thalassinus (Jordan and Gilbert Shadow goby. P Quietula y-cauda (Jenkins and Evermann Smallmouth goby. A Risor ruber (Rosén Blind goby. P Typhlogobius californiensis Steindachne Microdesmidae—wormfishes Pugjaw wormfish. A Microdesmus floridanus (Longley Pink wormfish. A Microdesmus longipinnis (Weymouth Scorpaenidae—scorpionfishes and rockfishes Blackbelly rosefish. A Helicolenus dactylopterus (De la Roche Spinycheek scorpionfish. A Neomerinthe pollux (Poey Longsnout scorpionfish. A Neomerinthe pollux (Poey Longsnout scorpionfish. A Pontinus longispinis Goode and Bear Highfin scorpionfish. A Scorpaena atlantica Nichols and Brede Goosehead scorpionfish. A Scorpaena atlantica Nichols and Brede Goosehead scorpionfish. A Scorpaena brasiliensis Cuvie Smoothhead scorpionfish. A Scorpaena dispar Longley and Hildebrane Hunchback scorpionfish. A Scorpaena dispar Longley and Hildebrane A Scorpaena dispar Longley and Hildebrane		. P	Lythrypnus dalli (Gilbert)
Seminole goby. A Microgobius carri Fowle Clown goby. A Microgobius gulosus (Girard Banner goby. A Microgobius microlepis Longley and Hildebranc Green goby. A Microgobius thalassinus (Jordan and Gilbert Shadow goby. P Quietula y-cauda (Jenkins and Evermann Smallmouth goby. A Risor ruber (Rosén Blind goby. P Typhlogobius californiensis Steindachne Microdesmidae—wormfishes Pugjaw wormfish. A Microdesmus floridanus (Longley Pink wormfish. A Microdesmus longipinnis (Weymouth Scorpaenidae—scorpionfishes and rockfishes Blackbelly rosefish. A Microdesmus longipinnis (Weymouth Scorpaenidae—scorpionfishes and rockfishes Blackbelly rosefish. A Helicolenus dactylopterus (De la Roche Spinycheek scorpionfish. A Neomerinthe pollux (Poey Longsnout scorpionfish. A Pontinus castor Poey Scalyhead scorpionfish. A Pontinus longispinis Goode and Bear Highfin scorpionfish. A Pontinus rathbuni Goode and Bear Longfin scorpionfish. A Scorpaena agassizi Goode and Bear Red scorpionfish. A Scorpaena atlantica Nichols and Brede Goosehead scorpionfish. A Scorpaena bergi Evermann and Marst Smoothhead scorpionfish. A Scorpaena calcarata Goode and Bear Hunchback scorpionfish. A Scorpaena dispar Longley and Hildebranc Hunchback scorpionfish. A Scorpaena dispar Longley and Hildebranc			Lythrypnus zebra (Gilbert)
Clown goby A Microgobius gulosus (Girard Banner goby A Microgobius microlepis Longley and Hildebrand Green goby A Microgobius thalassinus (Jordan and Gilbert Shadow goby P Quietula y-cauda (Jenkins and Evermann Smallmouth goby A Risor ruber (Rosén Blind goby P Typhlogobius californiensis Steindachne Microdesmidae—wormfishes Pugjaw wormfish A Microdesmus floridanus (Longley Pink wormfish A Microdesmus longipinnis (Weymouth Scorpaenidae—scorpionfishes and rockfishes Blackbelly rosefish A Helicolenus dactylopterus (De la Roche Spinycheek scorpionfish A Neomerinthe pollux (Poey Longsnout scorpionfish A Pontinus castor Poet Scalyhead scorpionfish A Pontinus longispinis Goode and Bear Highfin scorpionfish A Scorpaena agassizi Goode and Bear Red scorpionfish A Scorpaena atlantica Nichols and Brede Goosehead scorpionfish A Scorpaena brasiliensis Cuvie Smoothhead scorpionfish A Scorpaena brasiliensis Cuvie Smoothhead scorpionfish A Scorpaena dispar Longley and Hildebrand Hunchback scorpionfish A Scorpaena dispar Longley and Hildebrand Hunchback scorpionfish A Scorpaena dispar Longley and Hildebrand	Seminole goby		Microgobius carri Fowler
Banner goby A Microgobius microlepis Longley and Hildebrane Green goby A Microgobius thalassinus (Jordan and Gilbert Shadow goby P Quietula y-cauda (Jenkins and Evermann Smallmouth goby A Risor ruber (Rosén Blind goby P Typhlogobius californiensis Steindachne Microdesmidae—wormfishes Pugjaw wormfish A Microdesmus floridanus (Longley Pink wormfish A Microdesmus longipinnis (Weymouth Scorpaenidae—scorpionfishes and rockfishes Blackbelly rosefish A Helicolenus dactylopterus (De la Roche Spinycheek scorpionfish A Neomerinthe pollux (Poey Longsnout scorpionfish A Pontinus castor Poet Scalyhead scorpionfish A Pontinus longispinis Goode and Bear Highfin scorpionfish A Scorpaena agassizi Goode and Bear Goosehead scorpionfish A Scorpaena atlantica Nichols and Brede Goosehead scorpionfish A Scorpaena bergi Evermann and Marsl Barbfish A Scorpaena bergi Evermann and Marsl Smoothhead scorpionfish A Scorpaena dispar Longley and Hildebrane Hunchback scorpionfish A Scorpaena dispar Longley and Hildebrane Hunchback scorpionfish A Scorpaena dispar Longley and Hildebrane	Clown goby		Microgobius gulosus (Girard)
Green goby			
Shadow goby. P Quietula y-cauda (Jenkins and Evermann Rallmouth goby A Risor ruber (Rosén Blind goby P Typhlogobius californiensis Steindachne Microdesmidae—wormfishes Pugjaw wormfish A Microdesmus floridanus (Longley Pink wormfish A Microdesmus longipinnis (Weymouth Scorpaenidae—scorpionfishes and rockfishes Blackbelly rosefish A Helicolenus dactylopterus (De la Roche Spinycheek scorpionfish A Neomerinthe pollux (Poey Longsnout scorpionfish A Neomerinthe pollux (Poey Longsnout scorpionfish A Pontinus longispinis Goode and Bear Highfin scorpionfish A Scorpaena agassizi Goode and Bear Red scorpionfish A Scorpaena agassizi Goode and Brede Goosehead scorpionfish A Scorpaena brasiliensis Cuvie Smoothhead scorpionfish A Scorpaena brasiliensis Cuvie Smoothhead scorpionfish A Scorpaena calcarata Goode and Bear Hunchback scorpionfish A Scorpaena dispar Longley and Hildebrand Hunchback scorpionfish A Scorpaena dispar Longley and Hildebrand			lassinus (Jordan and Gilbert)
Smallmouth goby A		P Quietula u-ca	uda (Jenkins and Evermann)
Microdesmidae—wormfishes Pugjaw wormfish A Microdesmus floridanus (Longley Pink wormfish A Microdesmus longipinnis (Weymouth Scorpaenidae—scorpionfishes and rockfishes Blackbelly rosefish A Helicolenus dactylopterus (De la Roche Spinycheek scorpionfish A Neomerinthe pollux (Poey Longsnout scorpionfish A Pontinus castor Poey Scalyhead scorpionfish A Pontinus longispinis Goode and Bear Highfin scorpionfish A Pontinus rathbuni Goode and Bear Longfin scorpionfish A Scorpaena agassizi Goode and Bear Red scorpionfish A Scorpaena atlantica Nichols and Brede Goosehead scorpionfish A Scorpaena bergi Evermann and Marsl Barbfish A Scorpaena brasiliensis Cuvie Smoothhead scorpionfish A Scorpaena calcarata Goode and Bear Hunchback scorpionfish A Scorpaena dispar Longley and Hildebrand		A	Risor ruber (Rosén)
Microdesmidae—wormfishes Pugjaw wormfish A Microdesmus floridanus (Longley Pink wormfish A Microdesmus longipinnis (Weymouth Scorpaenidae—scorpionfishes and rockfishes Blackbelly rosefish A Helicolenus dactylopterus (De la Roche Spinycheek scorpionfish A Neomerinthe pollux (Poey Longsnout scorpionfish A Pontinus castor Poey Scalyhead scorpionfish A Pontinus longispinis Goode and Bear Highfin scorpionfish A Pontinus rathbuni Goode and Bear Longfin scorpionfish A Scorpaena agassizi Goode and Bear Red scorpionfish A Scorpaena atlantica Nichols and Brede Goosehead scorpionfish A Scorpaena bergi Evermann and Marsl Barbfish A Scorpaena brasiliensis Cuvie Smoothhead scorpionfish A Scorpaena calcarata Goode and Bear Hunchback scorpionfish A Scorpaena dispar Longley and Hildebrand		P Tunhlogohi	us californiensis Steindachner
Pugjaw wormfish A Microdesmus floridanus (Longley Pink wormfish A Microdesmus longipinnis (Weymouth Scorpaenidae—scorpionfishes and rockfishes Blackbelly rosefish A Helicolenus dactylopterus (De la Roche Spinycheek scorpionfish A Neomerinthe pollux (Poey Longsnout scorpionfish A Pontinus castor Poet Scalyhead scorpionfish A Pontinus rotathouni Goode and Bear Highfin scorpionfish A Pontinus rathbuni Goode and Bear Longfin scorpionfish A Scorpaena agassizi Goode and Bear Red scorpionfish A Scorpaena atlantica Nichols and Brede Goosehead scorpionfish A Scorpaena bergi Evermann and Marsl Barbfish A Scorpaena brasiliensis Cuvie Smoothhead scorpionfish A Scorpaena dispar Longley and Hildebrand Hunchback scorpionfish A Scorpaena dispar Longley and Hildebrand			as carrothicasts stemachner
Pink wormfish A Microdesmus longipinnis (Weymouth Scorpaenidae—scorpionfishes and rockfishes Blackbelly rosefish A Helicolenus dactylopterus (De la Roche Spinycheek scorpionfish A Neomerinthe pollux (Poey Longsnout scorpionfish A Pontinus castor Poey Scalyhead scorpionfish A Pontinus longispinis Goode and Bear Highfin scorpionfish A Pontinus rathbuni Goode and Bear Longfin scorpionfish A Scorpaena agassizi Goode and Bear Red scorpionfish A Scorpaena atlantica Nichols and Brede Goosehead scorpionfish A Scorpaena bergi Evermann and Marsl Barbfish A Scorpaena brasiliensis Cuvie Smoothhead scorpionfish A Scorpaena calcarata Goode and Bear Hunchback scorpionfish A Scorpaena dispar Longley and Hildebrand			
Scorpaenidae—scorpionfishes and rockfishes Blackbelly rosefish A Helicolenus dactylopterus (De la Roche Spinycheek scorpionfish A Neomerinthe pollux (Poey Longsnout scorpionfish A Pontinus castor Poet Scalyhead scorpionfish A Pontinus longispinis Goode and Bear Highfin scorpionfish A Pontinus rathbuni Goode and Bear Longfin scorpionfish A Scorpaena agassizi Goode and Bear Red scorpionfish A Scorpaena atlantica Nichols and Brede Goosehead scorpionfish A Scorpaena bergi Evermann and Marst Barbfish A Scorpaena brasiliensis Cuvie Smoothhead scorpionfish A Scorpaena calcarata Goode and Bear Hunchback scorpionfish A Scorpaena dispar Longley and Hildebrand	Pugjaw wormfish	. A	rodesmus floridanus (Longley)
Blackbelly rosefish A Helicolenus dactylopterus (De la Roche Spinycheek scorpionfish A Neomerinthe pollux (Poey Longsnout scorpionfish A Pontinus castor Poet Scalyhead scorpionfish A Pontinus longispinis Goode and Bear Highfin scorpionfish A Pontinus rathbuni Goode and Bear Longfin scorpionfish A Scorpaena agassizi Goode and Bear Red scorpionfish A Scorpaena atlantica Nichols and Brede Goosehead scorpionfish A Scorpaena bergi Evermann and Marsl Barbfish A Scorpaena brasiliensis Cuvie Smoothhead scorpionfish A Scorpaena calcarata Goode and Bear Hunchback scorpionfish A Scorpaena dispar Longley and Hildebrand	Pink wormfish	. A	mus longipinnis (Weymouth)
Spinycheek scorpionfishANeomerinthe pollux (Poey Pontinus castor Poet Longsnout scorpionfishScalyhead scorpionfishAPontinus longispinis Goode and Bear Pontinus rathbuni Goode and Bear Read scorpionfishLongfin scorpionfishAScorpaena agassizi Goode and Bear Read scorpionfishRed scorpionfishAScorpaena atlantica Nichols and BredeGoosehead scorpionfishAScorpaena bergi Evermann and Marsl Scorpaena brasiliensis CuvieSmoothhead scorpionfishAScorpaena calcarata Goode and Bear Hunchback scorpionfishAScorpaena dispar Longley and Hildebrand	Scorpaen	idae—scorpionfishes and rock	tfishes
Spinycheek scorpionfishANeomerinthe pollux (Poey Pontinus castor Poet Longsnout scorpionfishScalyhead scorpionfishAPontinus longispinis Goode and Bear Pontinus rathbuni Goode and Bear Read scorpionfishLongfin scorpionfishAScorpaena agassizi Goode and Bear Read scorpionfishRed scorpionfishAScorpaena atlantica Nichols and BredeGoosehead scorpionfishAScorpaena bergi Evermann and Marsl Scorpaena brasiliensis CuvieSmoothhead scorpionfishAScorpaena calcarata Goode and Bear Hunchback scorpionfishAScorpaena dispar Longley and Hildebrand			
Longsnout scorpionfishAPontinus castor PoetScalyhead scorpionfishAPontinus longispinis Goode and BearHighfin scorpionfishAPontinus rathbuni Goode and BearLongfin scorpionfishAScorpaena agassizi Goode and BearRed scorpionfishAScorpaena atlantica Nichols and BredeGoosehead scorpionfishAScorpaena bergi Evermann and MarslBarbfishAScorpaena brasiliensis CuvieSmoothhead scorpionfishAScorpaena calcarata Goode and BearHunchback scorpionfishAScorpaena dispar Longley and Hildebrand	Spinycheek scarpionfish	A	Neamerinthe nollur (Poor)
Scalyhead scorpionfish A Pontinus longispinis Goode and Bear Highfin scorpionfish A Pontinus rathbuni Goode and Bear Longfin scorpionfish A Scorpaena agassizi Goode and Bear Red scorpionfish A Scorpaena atlantica Nichols and Brede Goosehead scorpionfish A Scorpaena bergi Evermann and Marsl Barbfish A Scorpaena brasiliensis Cuvie Smoothhead scorpionfish A Scorpaena calcarata Goode and Bear Hunchback scorpionfish A Scorpaena dispar Longley and Hildebrand		Δ	
Highfin scorpionfish A Pontinus rathbuni Goode and Bear Longfin scorpionfish A Scorpaena agassizi Goode and Bear Red scorpionfish A Scorpaena atlantica Nichols and Brede Goosehead scorpionfish A Scorpaena bergi Evermann and Marsl Barbfish A Scorpaena brasiliensis Cuvie Smoothhead scorpionfish A Scorpaena calcarata Goode and Bear Hunchback scorpionfish A Scorpaena dispar Longley and Hildebrand		Δ Ponting	e Innaisminis Goods and Rosn
Longfin scorpionfish A Scorpaena agassizi Goode and Bear Red scorpionfish A Scorpaena atlantica Nichols and Brede Goosehead scorpionfish Red scorpionfish A Scorpaena bergi Evermann and Marsh Scorpaena bergi Evermann and Marsh Scorpaena brasiliensis Cuvie Barbfish A Scorpaena calcarata Goode and Bear Hunchback scorpionfish A Scorpaena dispar Longley and Hildebrand			nue rathbuni Goode and Roan
Red scorpionfish A Scorpaena atlantica Nichols and Brede Goosehead scorpionfish A Scorpaena bergi Evermann and Marsl Barbfish A Scorpaena brasiliensis Cuvie Smoothhead scorpionfish A Scorpaena calcarata Goode and Bear Hunchback scorpionfish A Scorpaena dispar Longley and Hildebrand		Λ	iona aggesizi Coode and Beau
Goosehead scorpionfish A Scorpaena bergi Evermann and Marsl Barbfish A Scorpaena brasiliensis Cuvie Smoothhead scorpionfish A Scorpaena calcarata Goode and Bear Hunchback scorpionfish A Scorpaena dispar Longley and Hildebrand	Pod governorfish	A	atlantica Nichola and Brader
Barbfish A Scorpaena brasiliensis Cuvie Smoothhead scorpionfish A Scorpaena calcarata Goode and Bear Hunchback scorpionfish A Scorpaena dispar Longley and Hildebrand	Coachard correspond	. AScorpaena	a hand Everyness and March
Smoothhead scorpionfish		. Ascorpaen	a vergi Evermann and Marsn
Hunchback scorpionfish A Scorpaena dispar Longley and Hildebrand	Darbiish	. A	Scorpaena oraștiiensis Cuvier
Lionfish		. AScorpae	ena calcarata Goode and Bean
Lionnish		. AScorpaena di	spar Longley and Hildebrand
	Lionnsh	. A	scorpaena grandicornis Cuvier

	N/	AMES OF FISHES	37
COMMON NAME	OCCURI	RENCE	SCIENTIFIC NAME
California scorpionfish	P		Seorpaena guttata Girard
Mushroom scorpionfish	A		Scorpaena inermis Cuvier
Finescale scorpionfish	A		Seorpaena microlepis Gunter
Spotted scorpionfish	A		Seorpaena plumieri Bloch
Reef scorpionfish	A	Scorpaenod	es caribbaeus Meek and Hildebrand
Redfish or ocean perch	A		Sebastes marinus (Linnaeus)
Blackthroat rockfish	P		aleutianus Jordan and Evermann
Pacific ocean perch	P	0.7	Sebastodes alutus (Gilbert)
Kelp rockfish	. P	Sebaste	odes atrovirens (Jordan and Gilbert)
Brown rockfish	P		Sebastodes auriculatus (Girard)
Aurora rockfish	<u>P</u>		Sebastodes aurora (Gilbert)
Silvergray rockfish			Sebastodes brevispinis (Bean)
Gopher rockfish	. P	Sebas	todes carnatus (Jordan and Gilbert)
Copper rockfish	. P		Sebastodes caurinus (Richardson)
Greenspotted rockfish	<u>P</u>	Sebastode	es ehlorostictus (Jordan and Gilbert)
Black-and-yellow rockfish	. P	\dots Sebastode	es chrysomelas (Jordan and Gilbert)
Dusky rockfish	. P		Sebastodes ciliatus (Tilesius)
Starry rockfish	. P		es constellatus (Jordan and Gilbert)
Blackmouth rockfish	. P		Sebastodes erameri Jordan
Calico rockfish	. P	Sebast	odes dalli (Eigenmann and Beeson)
Splitnose rockfish	. P		Sebastodes diploproa (Gilbert)
Greenstriped rockfish	. <u>P</u>		Sebastodes elongatus (Ayres)
Puget Sound rockfish	. P		Sebastodes emphaeus Starks
Widow rockfish	. <u>P</u>	Sebasto	odes entomelas (Jordan and Gilbert)
Pink rockfish	. <u>P</u>	\ldots $Sebastode$	s eos (Eigenmann and Eigenmann)
Yellowtail rockfish	. <u>P</u>		Schastodes flavidus Ayres
Bronzespotted rockfish	. <u>P</u>	$\dots Sebastod$	es gilli Eigenmann and Eigenmann
Chilipepper	. P	\ldots $Sebastodes$	goodei Eigenmann and Eigenmann
Rosethorn rockfish	. P		. Sebastodes helvomaculatus (Ayres)
Squarespot rockfish	. P		Sebastodes hopkinsi Cramer
Shortbelly rockfish	. P		Sebastodes jordani Gilbert
Cow rockfish	. P	\dots Sebastodes	levis (Eigenmann and Eigenmann)
Coral-red rockfish	. P	Sebastodes me	acdonaldi (Eigenmann and Beeson)
Quillback rockfish	. P	Seba	stodes maliger (Jordan and Gilbert)
Black rockfish	. P		Sebastodes melanops (Girard)
Blackgill rockfish	. P		Sebastodes melanostomus
			Eigenmann and Eigenmann
Vermilion rockfish	. P	$\ldots Sebast$	odes miniatus (Jordan and Gilbert)

Р

P

Р

Ρ

P

P

P

P

P

P

P

P

..... Sebastodes mystinus (Jordan and Gilbert)

..... Sebastodes nebulosus (Ayres)

..... Sebastodes nigrocinctus (Avres)

..... Sebastodes ovalis Ayres

..... Sebastodes paucispinis (Ayres)

..... Sebastodes pinniger (Jordan and Gilbert)

..... Sebastodes polyspinis (Taranetz and Moiseev)

..... Sebastodes proriger (Jordan and Gilbert)

..... Sebastodes rastrelliger (Jordan and Gilbert)

..... Sebastodes rhodochloris (Jordan and Gilbert)

..... Sebastodes rosaceus Jordan and Gilbert

..... Sebastodes ruberrimus Cramer

..... Sebastodes rubrivinctus (Jordan and Gilbert)

..... Sebastodes saxicola (Gilbert)

Blue rockfish.....

China rockfish.....

Tiger rockfish.....

Speckled rockfish.....

Bocaccio.....

Canary rockfish.....

Northern rockfish.....

Redstripe rockfish.....

Grass rockfish.....

Swordspine rockfish.....

Rosy rockfish.....

Rasphead rockfish.....

Flag rockfish.....

Stripetail rockfish.....

¹ The species here assigned to Sebastodes are referred by some authors to Sebastes.

COMMON NAME	OCCURE	ENCE	SCIENTIFIC NAME
Halfbanded rockfish Olive rockfish Treefish Honeycomb rockfish Whitebelly rockfish Pygmy rockfish Sharpchin rockfish Shortspine channel rockfish Longspine channel rockfish	P P P P P P P		Sebastodes semicinctus Gilbert Sebastodes serranoides Eigenmann and Eigenmann ebastodes serriceps (Jordan and Gilbert) bastodes umbrosus (Jordan and Gilbert) ebastodes vexillaris (Jordan and Gilbert) Sebastodes wilsoni Gilbert Sebastodes zacentrus (Gilbert) Sebastolobus alascanus Bean Sebastolobus altivelis Gilbert
	Trig	glidae—searo	bins
	A A A A A A A A A A A A A A A A A	omatidae—sa	Bellator brachychir (Regan) Bellator egretta (Goode and Bean) Bellator militaris (Goode and Bean) Peristedion imberbe (Poey) Peristedion miniatum Goode Prionotus alatus Goode and Bean Prionotus beani Goode Prionotus carolinus (Linnaeus) Prionotus evolans (Linnaeus) Prionotus martis Ginsburg Prionotus ophryas Jordan and Swain Prionotus paralatus Ginsburg Prionotus pectoralis Nichols and Breder Prionotus roseus Jordan and Evermann Prionotus rubio Jordan Prionotus scitulus Jordan and Gilbert Prionotus stearnsi Jordan and Swain Prionotus stearnsi Jordan and Swain Prionotus stephanophrys Lockington Prionotus tribulus Cuvier
Sablefish	P		
I	Hexagra	ammidae—gr	eenlings
Kelp greenling. Masked greenling. Whitespotted greenling. Rock greenling. Lingcod. Painted greenling. Atka mackerel.	P P P P		Hexagrammos decagrammus (Pallas) Hexagrammos octogrammus (Pallas) Hexagrammos stelleri Tilesius Hexagrammos superciliosus (Pallas) Ophiodon elongatus Girard Oxylebius pictus Gill . Pleurogrammus monopterygius (Pallas)
	Zaniol	epidae—coml	ofishes
Shortspine combfish Longspine combfish	P		Zaniolepis frenata Eigenmann Zaniolepis latipinnis Girard
Hookear sculpin	A		Artediellus uncinatus (Reinhardt)Artedius corallinus (Hubbs)

¹ In addition to the species included, some 45 cottids are known to occur in North American waters only in Alaska. Most are small and little known. Their inclusion in this list would be premature.

COMMON NAME	OCCURRI	ENCE	SCIENTIFIC NAME
Roughcheek sculpin	P		Artedius creaseri (Hubbs)
Padded sculpin			es fenestralis Jordan and Gilbert
Spurcheek sculpin	P		Artedius hankinsoni (Hubbs)
Scalyhead sculpin			Artedius harringtoni (Starks)
Smoothhead sculpin			Artedius lateralis (Girard)
Bonehead sculpin			Artedius notospilotus Girard
Rosylip sculpin			ays rhodorus Jordan and Gilbert
Spinynose sculpin			A semichthys taylori Gilbert
Crested sculpin			Blepsias bilobus Cuvier
Silverspotted sculpin			Blepsias cirrhosus (Pallas)
Roughback sculpin			onotus pugetensis (Steindachner)
Sharpnose sculpin			Clinocottus acuticeps (Gilbert)
Wooly sculpin			Clinocottus analis (Girard)
Calico sculpin	P	$\dots \dots Clinocottu$	s embryum (Jordan and Starks)
Mosshead sculpin	P		Clinocottus globiceps (Girard)
Bald sculpin	P		Clinocottus recalvus (Greeley)
Coastrange sculpin	P-F		
Eagle sculpin	\dots F		Cottus annae Jordan and Starks
Prickly sculpin	P-F		Cottus asper Richardson
Rough sculpin	F		Cottus asperrimus Rutter
Mottled sculpin			
Piute sculpin	\dots \mathbf{F}		ngi Eigenmann and Eigenmann
Malheur sculpin	<u>F</u>		
Banded sculpin	\dots \mathbf{F}		Cottus carolinae (Gill)
Slimy sculpin	$\dots \stackrel{\mathbf{F}}{=} $		Cottus cognatus Richardson
Shoshone sculpin	F		tus greenei (Gilbert and Culver)
Riffle sculpin	\dots F		
Columbia sculpin	$egin{array}{lll} & & & \mathbf{F} \\ & & & \mathbf{F} \end{array}$		Yottus hubbsi Bailey and DimickCottus klamathensis Gilbert
Marbled sculpin			iopomus Gilbert and Evermann
Margined sculpin	F		Cottus marginatus (Bean)
Reticulate sculpin	F		erplexus Gilbert and Evermann
Klamath Lake sculpin			
Torrent sculpin	F		Cottus rhotheus (Smith)
Spoonhead sculpin			Cottus ricci (Nelson)
Slender sculpin	F		us tenuis (Evermann and Meek)
Spinyhead sculpin	P		Dasycottus setiger Bean
Buffalo sculpin			Enophrys bison (Girard)
Bull sculpin			Enophrys taurina Gilbert
Soft sculpin	P	Gilbertid	ia sigalutes (Jordan and Starks)
Arctic staghorn sculpin			nocanthus tricuspis (Reinhardt)
Red Irish lord			epidotus hemilepidotus (Tilesius)
Brown Irish lord			Hemilepidotus spinosus (Ayres)
Sea raven			nitripterus americanus (Gmelin)
Northern sculpin	P		Icelinus borcalis Gilbert i Evermann and Goldsborough
Pit-head sculpin			Icelinus cavifrons Gilbert
Threadfin sculpin			Icelinus filamentosus Gilbert
Fringed sculpin			Icelinus fimbriatus Gilbert
Frogmouth sculpin			Icelinus oculatus Gilbert
Yellowchin sculpin			nus quadriseriatus (Lockington)
Spotfin sculpin			Icelinus tenuis Gilbert
Twohorn sculpin	A		Icelus bicornis (Reinhardt)
Spatulate sculpin	A-P		celus spatula Gilbert and Burke
Longfin sculpin	P		Jordania zonope Starks

COMMON NAME	OCCURRENCE	SCIENTIFIC NAME
Lavender sculpin Pacific staghorn sculpin Blackfin sculpin Grubby Longhorn sculpin Great sculpin Fourhorn sculpin Arctic sculpin Shorthorn sculpin Sailfin sculpin Tidepool sculpin Saddleback sculpin Rosy sculpin Fluffy sculpin Snubnose sculpin Snubnose sculpin	P-F Malacocottus k A M A Myoxocephala P Myoxocephala A-F-P Myoxoce A-P Myoxoc A-P Myoxoc P Nau P P P P P P P P P P P P P Orthon	ephalus scorpioides (Fabricius) xocephalus scorpius (Linnaeus) tichthys oculofasciatus (Girard) . Oligocottus maculosus Girard Oligocottus rimensis (Greeley) . Oligocottus rubellio (Greeley) . Oligocottus snyderi Greeley opias triacis Starks and Mann
Thornback sculpin Tadpole sculpin Slim sculpin Darter sculpin Smoothgum sculpin Grunt sculpin Puget Sound sculpin Cabezon Manacled sculpin Roughspine sculpin Mailed sculpin Ribbed sculpin	P P P P P P P P P P P P P P P P P P P	Eigenmann and Eigenmann sychrolutes paradoxus Günther Radulinus asprellus Gilbert Radulinus boleoides Gilbert Radulinus vinculus Bolin phocottus richardsoni Günther ius meanyi Jordan and Starks aenichthys marmoratus (Ayres) Synchirus gilli Bean Triglops macellus (Bean) Triglops nybelini Jensen Triglops pingeli Reinhardt
Agoni	dae—poachers and alligatorfi	
Northern spearnose poacher Southern spearnose poacher Sturgeon poacher Atlantic poacher Smooth alligatorfish Aleutian alligatorfish Alligatorfish Arctic alligatorfish Gray starsnout Spinycheek starsnout Bigeye poacher Blackfin poacher Rockhead Fourhorn poacher Bering poacher Bering poacher Pygmy poacher Tubenose poacher Longnose poacher Beardless poacher Pricklebreast poacher Blacktip poacher Blacktip poacher Blacktip poacher	P P A Agonus a P A P A A Aspidoph A-P P P Ast P Ast P Both P Both P Hyp P P P Odor P P P P P Stell P Stellerina X Stellerina	emmelane (Jordan and Starks)Agonopsis sterletus (Gilbert)Agonus acipenserinus Tilesius decagonus Bloch and Schneider noplagonus inermis (Günther) spidophoroides bartoni Gilbert toroides monopterygius (Bloch) Aspidophoroides olriki LütkenAsterotheca alascana (Gilbert) terotheca infraspinata (Gilbert) terotheca infraspinata (Gilbert) athyagonus nigripinnis Gilbert tragonus swani (Steindachner) sagonus quadricornis (Cuvier)Occa dodecaedra (Tilesius)Occa verrucosa (Lockington) ttopyxis trispinosa Lockington ttopyxis trispinosa Lockington tlasina barbata (Steindachner)Sarritor frenatus (Gilbert) farritor leptorhynchus (Gilbert) gis vulsa (Jordan and Gilbert) tyosterna (Jordan and Gilbert) Xeneretmus latifrons (Gilbert)

COMMON NAME	CCURF	RENCE	SCIENTIFIC NAMI
Cutfin poacher	. P		Xeneretmus leiops Gilber Xeneretmus ritteri Gilber neretmus triacanthus (Gilbert
-		—lumpfishes and snailf	
Smooth lumpsucker Longfin snailfish Globefish Arctic lumpsucker Lumpfish Leatherfin lumpsucker Pacific spiny lumpsucker Atlantic spiny lumpsucker Newfoundland spiny lumpsucker Seasnail Spotted snailfish Ribbon snailfish Polka-dot snailfish Marbled snailfish Mirbled snailfish Tidepool snailfish Gelatinous seasnail Slipskin snailfish Showy snailfish Ringtail snailfish Ringtail snailfish Ringtail snailfish Rringtail snailfish Brickly snailfish Prickly snailfish Dering snailfish Bering snailfish Lobefin snailfish	. A . P . A . A-P . P . A A . A . P . P . P . A-P . P . A-P . A-P . P . A-P . P . A-P	Cyclop Cyclop Cyclop E E Eumicrotremus t Liparis atlan Lipa Lipa Lipa Lipa Polypera be	Aptocyclus ventricosus (Pallas Careproctus longipinnis Burke Careproctus longipinnis Burke Decrichthys glaber Steindachner Lopteropsis macalpini (Fowler Cyclopterus lumpus Linnaeus Lumicrotremus derjugini Popov Lumicrotremus orbis (Günther microtremus spinosus (Müller terraenovae Myers and Böhlke ticus (Jordan and Evermann Liparis callyodon (Pallas Liparis cyclopus Günther Liparis cyclopus Günther Liparis cyclopus Günther Liparis fordan and Starks ris florae (Jordan and Starks Liparis fucensis Gilbert Liparis liparis (Linnaeus Liparis mucosus Ayres s rutteri (Gilbert and Snyder Liparis tunicatus Reinhardt s pelagicus Gilbert and Burker Liparia (Gilbert and Burker Liparia) (Gilbert and Burker Liparia)
			ra greeni (Jordan and Starks)
		eridae—flying gurnards	
Flying gurnard			ctylopterus volitans (Linnaeus)
	richoc	lontidae—sandfishes	
Sailfin sandfish			pus japonicus (Steindachner) Trichodon trichodon (Tilesius)
A	mmod	lytidae—sand lances	
American sand lance	. A		nmodytes americanus DeKay Ammodytes dubius Reinhardt Ammodytes hexapterus Pallas
О	pistho	gnathidae—jawfishes	
Swordtail jawfishYellowhead jawfish	. A . A	Lor	nchopisthus lindneri Ginsburg Opisthognathus aurifrons (Jordan and Thompson)
Banded jawfish. Longtail jawfish. Spotfin jawfish. Mottled jawfish.	. A . A	Op is though at hus with the constant of the constant o	isthognathus fasciatus Longley lonchurus Jordan and Gilbert hognathus macrognathus Poey pisthognathus maxillosus Poey

COMMON NAME OC	CURR	RENCE SCIENTIFIC NAME
Pensacola jawfish	A A	Opisthognathus mystacinus (Jordan) Opisthognathus whitehursti (Longley)
Ba	athyr	masteridae—ronquils
Alaskan ronquil	P P P P	Bathymaster caeruleofasciatus Gilbert and Burke Bathymaster signatus Cope Rathbunella alleni Gilbert Rathbunella hypoplectus (Gilbert) Ronquilus jordani (Gilbert)
F	erco	phididae—flatheads
Duckbill flathead	A	
U	ranos	scopidae—stargazers
Freekled stargazer Northern stargazer Southern stargazer Lancer stargazer Smooth stargazer	A A A P	
Dacty	losco	opidae—sand stargazers
Sand stargazer	A	
C	allio	nymidae—dragonets
Lancer dragonet	A A	
	С	linidae—clinids
Roughhead blenny Spinyhead blenny Island kelpfish Checkered blenny Orangethroat pikeblenny Bluethroat pikeblenny Deepwater blenny Banner blenny Glass blenny Sailfin blenny Pirate blenny Redeye blenny Spotted kelpfish Scarlet kelpfish Striped kelpfish Crevice kelpfish Wrasse blenny Giant kelpfish	A P A P A A A A A P P P A P A P A P P A P A P P A P P P P P P A A A P	Acanthemblemaria aspera (Longley) Acanthemblemaria spinosa Metzelaar Alloclinus holderi (Lauderbach) Brannerella ocellata (Steindachner) Chaenopsis alepidota (Gilbert) Chaenopsis ocellata Poey Cryptotrema corallinum Gilbert Emblemaria atlantica Jordan and Evermann Emblemaria diaphana (Longley) Emblemaria pandionis Evermann and Marsh Emblemaria piratula Ginsburg and Reid Enneapterygius pectoralis Fowler Gibbonsia elegans (Cooper) Gibbonsia erythra Hubbs Gibbonsia montereyensis Hubbs Hemiemblemaria simulus Longley and Hildebrand Heterostichus rostratus Girard

COMMON NAME	OCCURRE	ENCE SCIENTIFIC NAME
Mimic blenny Downy blenny Spotcheek blenny Hairy blenny Rosy blenny Saddled blenny Sarcastic fringehead Yellowfin fringehead Onespot fringehead Coral blenny Banded blenny Horned blenny Horned blenny Reef finspot Marbled blenny Blackfin blenny Blackbelly blenny Eelgrass blenny	A A A A P P P A A A A A A	Labrisomus guppyi (Norman) Labrisomus kalisherae (Jordan) Labrisomus nigricinctus Howell Rivero Labrisomus nuchipinnis (Quoy and Gaimard) Malacoctenus macropus (Poey) Malacoctenus triangulatus Springer Neoclinus blanchardi Girard Neoclinus stephensae Hubbs Neoclinus uninotatus Hubbs Paraclinus cingulatus (Evermann and Marsh) Paraclinus fasciatus (Steindachner) Paraclinus grandicomis (Rosén) Paraclinus marmoratus (Steindachner) Paraclinus nigripinnis (Steindachner) Stathmonotus hemphilli Bean Stathmonotus stahli (Evermann and Marsh)
Bl	enniidae	-combtooth blennies
Molly miller. Seaweed blenny. Highfin blenny. Fringe blenny. Striped blenny. Florida blenny. Pearl blenny. Barred blenny. Crested blenny. Rockpool blenny. Feather blenny. Freckled blenny. Redlip blenny.	A A A A A A A A A A A A A A A	Blennius cristatus Linnaeus Blennius marmoreus Poey Blennius nicholsi Tavolga Blennius pilicornis Cuvier Chasmodes bosquianus (Lacépède) Chasmodes saburrae Jordan and Gilbert Entomacrodus textilis (Quoy and Gaimard) Hypleurochilus bermudensis Beebe and Tee-Van Hypleurochilus geminatus (Wood) Hypsoblennius gentilis (Girard) Hypsoblennius gilberti (Jordan) Hypsoblennius hentzi (LeSueur) Hypsoblennius ionthas (Jordan and Gilbert) Ophioblennius atlanticus (Valenciennes)
		hadidae—wolffishes
Northern wolffish Atlantic wolffish Spotted wolffish Bering wolffish Wolf-eel	A A P	Anarhichas denticulatus Krøyer Anarhichas lupus Linnaeus Anarhichas minor Olafsen Anarhichas orientalis Pallas Anarrhichthys ocellatus Ayres
	Pho	olidae—gunnels
Penpoint gunnel Stippled gunnel Banded gunnel Bering gunnel Rock gunnel Crescent gunnel Saddleback gunnel Red gunnel Kelp gunnel Rockweed gunnel	P A P A P P P	

COMMON NAME	OCCURRENCE	SCIENTIFIC NAME		
	Stichaeidae¹—pricklebacks			
Snake blenny	P Allolumpenus hypoo P An P Cel P Chirolophus nug P Chiroloph A Crypt P Eumesog P (Ev A-P Lumpenus i A-P Lumpenus i A-P Lu P Lu P Phytichthys i P Ph P P P P A-P Stic A U P Xiphi	ermann and Goldsborough) enus fabricii (Valenciennes) lumpretaeformis (Walbaum)		
Trock blenny	Ptilichthyidae—quillfishes	11 photocr massocias (anula)		
Quillfish	_	Ptilichthys goodei Bean		
	Zoarcidae ² —eelpouts			
Bigfin eelpout Snakehead eelpout Fish doctor Wolf eelpout Blackmouth eelpout Pallid eelpout Black eelpout Newfoundland eelpout Wattled eelpout Pale eelpout Pale eelpout Arctic eelpout Polar eelpout Blackbelly eelpout Bearded eelpout Ocean pout	P	Aprodon cortezianus Gilbert. Embryx crotalina (Gilbert) Gymnelis viridis (Fabricius) s verrilli (Goode and Bean) Lycodapus fierasfer Gilbert dapus mandibularis Gilbert dapus mandibularis Gilbert Lycodes brevipes Bean Lycodes diapterus Gilbert ei Vladykov and Tremblay Lycodes palearis Gilbert Lycodes pallidus Collett ycodes reticulatus Reinhardt Lycodes reticulatus Reinhardt Lycodopsis pacifica (Collett) Lyconema barbatum Gilbert unus (Bloch and Schneider)		
Scytalinidae—graveldivers				
Graveldiver	PScytalina	cerdale Jordan and Gilbert		

¹ In addition to those listed, at least six species occur in our area only in Bering Sea. Too little is known about these to permit proposal of common names at this time.

² In addition to species listed, there are others that live in deep water off our coasts and some that occur over the continental shelf in northern seas, especially around Alaska.

COMMON NAME	OCCURI	RENCE	SCIENTIFIC NAME
	Zapı	roridae—prowfishes	
Prowfish	_	-	Zaprora silenus Jordan
	Bro	otulidae—brotulas	
Red brotula	P		(Bloch and Schneider)
Key Biotula		•	Evermann and Kendan
	•	nidiidae—cusk-eels	
Fawn cusk-eel Blackedge cusk-eel Mottled cusk-eel Bank eusk-eel Pencil eusk-eel Mooneye cusk-eel Crested cusk-eel Polka-dot cusk-eel Basketweave cusk-eel Spotted eusk-eel Striped cusk-eel	A A P A A A A A	Lepo Lepo Lepo Ophio Ophio Ophidion selen Ophidion welsh Otophidium omostigmu Otop	phidium graellsi (Poey) phidium jeannae Fowler lion holbrooki (Putnam) nidion novaculum Harry ops Robins and Böhlke ni (Nichols and Breder) m (Jordan and Gilbert) nidium scrippsae Hubbs phidium taylori (Girard)
	Cara	apidae—pearlfishes	
Pearlfish			ous bermudensis (Jones)
	Stroma	ateidae—butterfishes	
Black ruff Longfin cigarfish Silver-rag Medusafish Blackrag Man-of-war fish Barrelfish Pacific pompano Southern harvestfish Northern harvestfish Butterfish Freckled driftfish Silver driftfish Spotted driftfish	P P A A A A A	Cent Cubiceps Cubiceps Icichthys lockings No Palinurichthy Pali Peprilu Poro Ps	Cubiceps gracilis (Lowe) nigriargenteus Ginsburg toni Jordan and Gilbert cus pellucidus (Lütken) meus gronowi (Gmelin) s perciformis (Mitchill) meta simillima (Ayres) as alepidotus (Linnaeus) eprilus paru (Linnaeus) totus triacanthus (Peck) senes cyanophrys Cuvier senes maculatus Lütken
	Cetrago	onuridae—squaretails	
Bigeye squaretail Smalleye squaretail	. A . P		gonurus atlanticus Lowe tragonurus cuvieri Risso
	Icos	steidae—ragfishes	
Ragfish		o .	enigmaticus Lockington
	Sphyra	aenidae—barracudas	
Pacific barracuda	. P		hyraena argentea Girard habarracuda (Walbaum) hyraena borealis DeKay

COMMON NAME	OCCURRENCE	SCIENTIFIC NAME
Guaguanche		
	Mugilidae—mullets	
Mountain mullet. Striped mullet¹. White mullet Redeye mullet Liza Fantail mullet	A	Mugil cephalus Linnaeus Mugil curema Valenciennes igil gaimardiana Desmarest Mugil liza Valenciennes
	Atherinidae—silversides	
Reef silverside Hardhead silverside Topsmelt Jacksmelt Brook silverside California grunion Rough silverside Mississippi silverside Tidewater silverside Key silverside Waccamaw silverside Atlantic silverside	A Atherinomorus s P-F P F A Membr F A-F A Menidia conchorum F Menidia	etta harringtonensis (Goode) tipes (Müller and Troschel) Atherinops affinis (Ayres) tinopsis californiensis Girard Labidesthes sicculus (Cope) Leuresthes tenuis (Ayres) as martinica (Valenciennes) Menidia audens Hay Menidia beryllina (Cope) to Hildebrand and Ginsburg to extensa Hubbs and Raney Menidia menidia (Linnaeus)
	Polynemidae—threadfins	
Pacific threadfin	A	dactylus octonemus (Girard) olydactylus opercularis (Gill)
Order P.	LEURONECTIFORMES (HETEROSOM	MATA)
	Bothidae—lefteye flounders	
Three-eye flounder Ocellated flounder Peacock flounder Eyed flounder Pelican flounder Gulf Stream flounder Horned whiff Spotted whiff Pacific sanddab Bay whiff Speckled sanddab Longfin sanddab Mexican flounder Spotfin flounder Spiny flounder Fringed flounder Smallmouth flounder	A Ar A Che A Che A Citha A Citha A Cithar A Cithar P Cithar P Cithar A Cyclopsetta A Cyclopsetta A Etropus c	acylopsetta quadrocellata Gill . Bothus lunatus (Linnaeus) Bothus ocellatus (Agassiz)

¹ Known as black mullet in Florida.

COMMON NAME	OCCURREN	ICE SCIENTIFIC NAME
Gray flounder Shrimp flounder Bigmouth sole Slim flounder Deepwater flounder California halibut Summer flounder Southern flounder Fourspot flounder Broad flounder Windowpane Shoal flounder Channel flounder Dusky flounder Sash flounder Fantail sole	A A	
Ple	euronectida	ne—righteye flounders
Arrowtooth flounder Deepsea sole Petrale sole Witch flounder Rex sole Flathead sole American plaice Bering flounder Atlantic halibut Pacific halibut Diamond turbot Butter sole Rock sole Yellowfin sole Yellowfail flounder Longhead dab Arctic flounder Smooth flounder Slender sole English sole Starry flounder Alaska plaice C-O sole Curlfin sole Spotted turbot Hornyhead turbot Sand sole Winter flounder Greenland halibut	P P	
Lined sole	A .	eidae—solesAchirus lineatus (Linnaeus)
Naked sole	A .	

COMMON NAME	OCCURR	ENCE	SCIENTIFIC NAME
(Cynoglo	ssidae—tonguefishes	
California tonguefish Offshore tonguefish Spottedfin tonguefish Largescale tonguefish Pygmy tonguefish Longtail tonguefish Deepwater tonguefish Blackcheek tonguefish Northern tonguefish Spottail tonguefish	A A A A A A	Symphurus atricauda Symphur Symphurus diomedian Symph Symph Symphuru Symphuru Symphurus pig Symphurus pusill Symphurus pusill	rus civitatus Ginsburg us (Goode and Bean) nurus minor Ginsburg nurus parvus Ginsburg us pelicanus Ginsburg ner (Goode and Bean) s plagiusa (Linnaeus) us (Goode and Bean)
Order	ECHEN	EIFORMES (DISCOCEPHALI)	
	$\mathrm{Ech}\epsilon$	eneidae—remoras	
Sharksucker Whitefin sharksucker Slender suckerfish Whalesucker Spearfish remora Marlinsucker Remora White suckerfish	A A-P A-P A-P A-P		s neucratoides Zuieuw ys lineatus (Menzies) ra australis (Bennett) ra brachyptera (Lowe) ora osteochir (Cuvier) ora remora (Linnaeus)
Order	Gobies	OCIFORMES (XENOPTERYGII)	
	Gobies	socidae—clingfishes	
Emerald clingfish Northern clingfish Bearded clingfish Stippled clingfish California clingfish Skilletfish Slender clingfish Kelp clingfish	A P P A P		maeandricus (Girard) esox papillifer Gilbert ox punctulatus (Poey) iesox rhessodon Smith nesox strumosus Cope eigenmanni (Gilbert)
Opher T	ETTP A OD	ONTIFORMES (PLECTOGNATHI)	
		chodidae—spikefishes	
Jambeau			rdia lineata (Longley)
Balis	tidae—1	triggerfishes and filefishes	
Unicorn filefish Orange filefish Scrawled filefish Dotterel filefish Gray triggerfish Spotted triggerfish Finescale triggerfish Queen triggerfish Orangespotted filefish Rough triggerfish Ocean triggerfish Black durgon	A A A P A A A A A A A A A	Alutera Alutera Alutera Alu Alu Alu Bali Balistes p Canther Canthidermi Melicht	a schoepsi (Walbaum) utera scripta (Osbeck) tera ventralis Longley istes capriscus Gmelin stes forcipatus Gmelin volylepis Steindachner ulistes vetula Linnaeus ines pullus (Ranzani) nis maculatus (Bloch) s sufflamen (Mitchill)

COMMON NAME	OCCURR	RENCE SCIENTIFIC NAME
Fringed filefish Planehead filefish Pygmy filefish Slender filefish Redtail triggerfish Sargassum triggerfish	A A P	
	Ostra	ciidae—trunkfishes
Spotted trunkfish Cowfish Trunkfish Smooth trunkfish Spiny trunkfish	A A A	
	Tetra	nodontidae—puffers
Sharpnose puffer Smooth puffer Oceanic puffer Jugfish Bullseye puffer Marbled puffer Northern puffer Southern puffer Bandtail puffer Checkered puffer	A P A P A A A	Canthigaster rostrata (Bloch) Lagocephalus laevigatus (Linnaeus) Lagocephalus lagocephalus (Linnaeus) Lagocephalus pachycephalus (Ranzani) Sphaeroides annulatus (Jenyns) Sphaeroides dorsalis Longley Sphaeroides maculatus (Bloch and Schneider) Sphaeroides nephelus (Goode and Bean) Sphaeroides spengleri (Bloch) Sphaeroides testudincus (Linnaeus)
]	Diodont	idae—porcupinefishes
Pacific burrfish Bridled burrfish Web burrfish Spotted burrfish Striped burrfish Balloonfish Porcupinefish	A A A A A-P	
		Molidae—molas
Sharptail molaOcean sunfishSlender mola	A-P	
Order		choidiformes (Haplodoci) choididae—toadfishes
Gulf toadfish	A A P P	
Ord		PHIIFORMES (PEDICULATI)
Goosefish	_	hiidae—goosefishes

COMMON NAME	CCURF	RENCE	SCIENTIFIC NAME		
	Anten	nariidae—frogfishes			
Roughjaw frogfish Longlure frogfish Ocellated frogfish Singlespot frogfish Splitlure frogfish Sargassumfish	. A . A . A	Antennarius	us multiocellatus (Valenciennes) ocellatus (Bloch and Schneider) . Antennarius radiosus Garman Antennarius scaber (Cuvier)		
	Ogcocephalidae—batfishes				
Spiny batfish. Tricorn batfish. Shortnose batfish. Roughback batfish Polka-dot batfish Longnose batfish. Spotted batfish.	. A . A . A . A . A		Ogcocephatus mcgintyi Fowler cephalus nasutus (Valenciennes) parvus Longley and Hildebrand Ogcocephalus radiatus (Mitchill) cocephalus vespertilio (Linnaeus)		

PART II

Index to Common Names

\mathbf{A}		barbfish	
amilan	20	barbier, red	
agujon		barbu	46
albacore	33	barracuda, California—see barracuda,	
false—see tuna, little	10	Pacific	
alewife	10	great	45
alligatorfish		northern—see sennet, northern	
Aleutian		Pacific	45
Arctic		barracudas	
smooth		barreleye	
alligatorfishes	40	barreleyes	
allmouth—see goosefish		barrelfish	
amberjack, false-see amberjack, lesser		bass, bank sea	
greater	30	bigeye—see salema	20
lesser		black—see bass, largemouth; bass,	
Pacific	30	smallmouth; bass, spotted; bass, red-	
slender—see rudderfish, banded		· · · · · · · · · · · · · · · · · · ·	
anchoveta	11	eye	05
anchovies		blackear	
anchovy, bay		black sea	25
Cuban		see also bass, giant sea	
deepbody		blue—see blacksmith; croaker, black;	
dusky		opaleye; sargo	
flat		bull—see bass, kelp	
key		calico—see bass, kelp; crappie, black	~~
longnose		chalk	26
New Jersey		channel—see drum, red	
northern		Coosa—see bass, redeye	
Pacific—see anchovy, northern	11	crimson	
**	11	giant sea	26
silver		see also skilfish	
slim		Guadalupe	27
slough		kelp	25
striped	11	Kentucky—see bass, spotted	
angelfish, black—see angelfish, French;		lantern	25
angelfish, gray	90	largemouth	27
blue		longtail	25
French		orangeback	25
gray		pygmy sea	26
queen	32	redeye	27
white—see spadefish, Atlantic		see also bass, rock	
angler—see goosefish		reef	25
argentine, Atlantic		Roanoke	27
Pacific		rock	
argentines	12	rock sea	
D		roughtongue	25
В		saddle	25
bairdiella	31	sand	$2\overline{5}$
balao		silver—see bass, white	
balloonfish		smallmouth	27
ballyhoo.	20	southern sea	$\overline{25}$
redtail—see ballyhoo		speckled—see crappie, black	
		spectice see crappie, stack	

bass, splittail		downy	
spotted	27	eelgrass	
spotted sand	25	feather	
stone—see wreckfish		Florida	
strawberry—see crappie, black		freekled	
streamer	25	fringe	43
striped	26	fucus—see gunnel, rockweed	
Suwannee	27	glass	42
white	26	hairy	43
yellow	26	highfin	43
yellowtail	25	horned	43
basses, sea	25	longsnout	44
batfish, longnose	50	marbled	
polka-dot	50	mimie	43
roughback	50	monkeyface	44
shortnose	50	ornamented—see prickleback, moss-	
spiny	50	head	
spotted	50	pearl	43
tricorn	50	pen-point—see gunnel, penpoint	
baysmelt— see topsmelt		pirate	42
beadeye—see stonecat		redeye	42
beardfish		redlip	43
beardfishes		rock	44
beaugregory	33	see prickleback, black	
beauty, rock	32	rockpool	43
bergall—see cunner		rosy	43
bigeye		roughhead	42
short	26	$\operatorname{saddled} \dots \dots$	43
bigeyes	26	see gunnel, saddleback	
billfish—see needlefish; saury; gar		sailfin	42
billfishes	35	seaweed	43
bitterling	16	snake	44
blackback—see flounder, winter		spinyhead	42
blackcod—see sablefish		spotcheek	43
blackfish—see bass, black sea; tautog		striped	43
Alaska	12	whitebarred	
Sacramento		wrasse	
blackrag	45	blindcat, toothless	19
blacksmith	33	widemouth	19
blanquillo—see whitefish, ocean		blindfish—see cavefish	
blennies, combtooth	43	bloater	
blenny, banded		bluefish	
banner		bluefishes	
barred	43	bluegill	27
see prickleback, bluebarred		bluehead	
bay	43	boarfish, deepbody	24
belted—see prickleback, ribbon		shortspine	24
black—see prickleback, black		boarfishes	24
blackbelly	43	bobo—see threadfin, Pacific	
blackfin	43		37
bracketed—see gunnel, crescent			10
burrowing—see graveldiver	4.0		10
checkered	42	bonchead—see bonito, Pacific	0.5
coral	43		35
crested	43	California—see bonito, Pacific	
see also eockseomb	4.4	oceanic—see tuna, skipjack	0.~
decorated		Pacific	
deepwater	42	striped	35

bonnethead	8	candlefish—see eulachon	
bony fishes	9	capelin	12
bonytail	14	cardinalfish, barred	20
boo hoo—see mackerel, frigate		belted	
bowfin		bridle	26
bowfins	10	bronze	26
boxfish—see trunkfish		dusky	26
spiny—see burrfish, striped		freckled	20
bream—see pinfish; bluegill		pale	20
Ray's—see pomfret		sawcheek	26
sea	32	twospot	26
brill—see sole, petrale		whitestar	26
broadbill—see swordfish		cardinalfishes	20
brotula, bearded		carp	13
key		carps	
red		carpsucker, highfin	
brotulas		plains	
buffalo, bigmouth		river	
black	17	cartilaginous fishes	-€
gourd-head—see buffalo, bigmouth		catalufa—see also bigeye	
highback—see buffalo, smallmouth		popeye	26
mongrel—see buffalo, black		eatfish, bigmouth—see catfish, gafftopsail	
razorback—see buffalo, smallmouth		black—see bullhead, black	
redmouth—see buffalo, bigmouth		blue	18
round—see buffalo, black		brown—see bullhead, brown	
smallmouth	17	channel	
bull, Mexican—see margate, black		flathead	19
bullfish—see cabezon		forktail—see catfish, white	
bullhead—see also cabezon; sculpin, Pa-		gafftopsail	18
cific staghorn		headwater	18
black		mud—see catfish, flathead	
brown		Potomac—see catfish, white	
flat		sea	18
yellow		see also wolffish, Atlantic	
bumper		shovelhead—see catfish, flathead	
burbot	22	smallmouth—see catfish, sea	
burrfish, bridled		spoonbill—see paddlefish	
Pacific		squaretail—see bullhead, brown	
spotted		white	
striped		Yaqui	18
web		yellow—see catfish, flathead	
butterfish	45	catfishes, freshwater	
see also gunnel, rock		sea	18
butterfishes	40	cavefish, northern	22
butterflyfish, banded		Ozark	22
bank			22
foureye		spring	
longsnout		cavefishes	
reef		cero	35
spotfin		chaetodon—see sunfish, blackbanded	10
butterflyfishes	32	char, Arctic	12
\mathbf{C}		Great Lakes—see trout, lake	
	40	speckled—see trout, brook	10
cabezon	40		13
see also sculpin, Pacific staghorn		charr—see char	90
cabezone—see sculpin, Pacific staghorn cabio—see cobia		cherubfish	
cabrilla, spotted	25	chilipepper	
cabina, spotted	20	chimaeras	9

chinafish—see filefish, scrawled; rock-	cisco
fish, china	Arctic 11
chiro—see ladyfish	blackfin 11
chiselmouth	Bonneville
chromis, blue	deepwater
brown	least
chub—see also cisco	longjaw11
Alabama	Nipigon
arroyo	shortjaw11
Bermuda	shortnose
bigeye	white—see cisco, deepwater
blotched	clingfish, bearded 48
blue	California
bluehead	common—see clingfish, northern
Columbia River—see peamouth	emerald
creek	kelp
flame	northern
flathead	slender
gravel	stippled
highback	
	clingfishes
hornyhead	clinids
humpback	cobbler—see mummichog
Klamath—see chub, blue	cobia
lake	cobias
least	cockscomb44
leatherside	cod, Arctic
Mohave	Atlantic
northern—see chub, lake	black—see sablefish
Oregon	blue—see cabezon
peamouth—see peamouth	bull—see cabezon
redeye	channel—see rockfish, channel
Rio Grande 14	chili—see chilipepper
river 14	cultus—see lingcod
rosyface	Greenland
sieklefin 14	northern—see cod, saffron
silver	Pacific
slender 14	polar
Sonora	rock—see cod, Atlantic; rockfish
speckled	saffron
spotfin	codfishes
streamline	combfish, longspine 38
sturgeon	shortspine
thicklip	combfishes
thicktail	conchfish
Tui	coney
Utah	conger, bandtooth
Yaqui	Catalina
yellow	manytooth
chubs, sea	margintail
chubsucker, creek	silver
lake	whiptail
sharpfin	yellow
eichlid, pearl—see perch, Rio Grande	conny—see inconnu
velvet	
eichlids	convictfish—see greenling, painted corbina, California
eigarfish—see also scad, round; scad,	corbina, California
bigeye	cornetfishes
longfin 45	corvina, orangemouth

corvina, shortfin	31	leopard	16
cottonwick		longfin	
cowfish	49	longnose	
erabeater—see cobia		Moapa	14
crampfish—see ray, lesser electric	O##	mountain redbelly	
crappie, black		northern redbelly	
white		pearl	17
creole-fish		redside	
crestfish		rosyside	13
crestfishes	24	southern redbelly	
crevalle, green—see runner, blue jack—see jack, crevalle		speckled	
croaker, Atlantic	21	Umpqua	29
black		cocoa	- 22 - 20
blue		dusky	
Catalina		threespot.	- 53
china—see croaker, black; sargo	91	yellowtail	33
golden—see croaker, spotfin		damselfishes	
king—see croaker, white		darter, Arkansas	97
reef	31	Arkansas saddled	28
spotfin		arrow	
white		ashy	$\frac{20}{27}$
yellowfin		backwater	
cubbyu		banded	
cui-ui		barcheek	
cultus, Pacific—see lingcod	- •	blackbanded	29
cunner	34	blackside	29
cusk		blackside snubnose	27
cusk-eel, bank		blenny	27
basketweave		bluebreast	27
blackedge		blueside	28
crested		bluestripe	
fawn		bluntnose	27
mooneye	45	bronze	29
mottled		brown	28
pencil	45	Carolina	27
polka-dot	45	channel	29
spotted	45	Coosa	27
striped	45	crystal	27
cusk-eels	45	Cumberland snubnose	27
cutlassfish, Atlantic	34	cypress	28
Pacific		dusky	
cutlassfishes		eastern sand	
cyprinodon, variegated — see minnow,		fantail	28
sheepshead		finescale saddled	28
D		fountain	28
		gilt	29
dab—see also sanddab		glassy	
Atlantic sand—see windowpane		goldstripe	
longheaddl. David	47	greenbreast	28
mottled sand—see sanddab, Pacific		greenside	27
mud—see sole, yellowfin		greenthroat	
rough—see plaice, American		gulf	28
rusty—see flounder, yellowtail	16	Harlequin	28
dace, blacknose	16	Iowa	28 00
desertfinescale		Johnny	
horned—see chub, creek	13	Kanawhaleast	$\frac{28}{28}$
nomeu-see chud, creek		reast	- 48

darter, leopard			
longfin		doctorfish	34
longhead	29	dogfish, black	8
longnose		chain	7
Maryland	28	Cuban	8
Missouri saddled		freshwater—see bowfin	
mud		smooth	7
naked sand		spiny	8
Niangua		dollarfish—see harvestfish	
olive		Dolly Varden	12
orangebelly		dolphin	
orangethroat	28	pompano	
Piedmont		dolphins	30
pinewoods	28	dorado—see dolphin	
rainbow		doré—see walleye	0.4
redband	28	dories	
redfin	28	Dory, American John	24
redline	28	doughbelly—see stoneroller	40
Rio Grande	28	dragonet, coral	42
river	29		
riverweed	$\frac{28}{28}$	spotted	42
Saluda		dragonets	
Savannah	28	driftfish, freekled	45
sawcheek		spotted	
scalyhead	$\frac{26}{27}$	drum, banded	
scaly sand		black	
seagreen	28	freshwater	
sharphead		red	
sharpnose	$\frac{20}{29}$	sand	
shield	$\frac{29}{29}$	sea—see drum, black	or
slenderhead	$\frac{29}{29}$	spotted	31
slough	$\frac{23}{28}$	star	
speckled	$\frac{28}{28}$	striped	
spottail	$\frac{28}{28}$	drums	
spotted	$\frac{28}{28}$	durgon, black	
stargazing	$\frac{1}{29}$	G ,	
stippled	$\frac{1}{28}$	E	
stripeback	29	eel, American	19
striped	28	blotched snake	
stripetail	28		19
swamp	28	conger	19
Swannanoa	28	congo—see wrymouth, giant	
Tennessee snubnose		finless	
Tippecanoe		goldspotted	
Tuckasegee	28	horsehair	
turquoise	28	key worm	19
Tuscumbia		lamprey—see lamprey	
variegate		monkeyface—see blenny, monkeyface	
Waccamaw			20
western sand		Pacific snake	
yellow		1	20
yoke	28		19
lealfish	24	rock—see gunnel, rock	10
levil, red—see wrymouth, dwarf			19
levilfish, little—see ray, devil	0.0	sand—see lance, sand	10
lick, slippery	33	sharptail	19
liver, sand	13	shorttail snake	19

eel, shrimp.	20	serawled	48
silver—see cutlassfish	10	slender	49
slender pikeslime—see hagfish	19	unicornfilefishes	48
snapper	20	finspot, reef	40
sooty	19	fish, dovetail—see sergeant, night	4+)
speckled worm		flag, Spanish	2.5
spiny		see also rockfish, flag	
spotted snake		flagfish	21
spotted spoon-nose		flamefish	26
stippled spoon-nose		flasher—see tripletail	
surf		flatfish—see flounder, winter	
thread		flathead, duckbill	
tiger snake		goby	42
whip		flatheads	42
eelback—see flounder, smooth	20	flounder, Arctic	17
eelblenny, slender	44	arrowtooth	47
stout		Bering	47
eelpout—see also pout, ocean; burbot		broad	
Arctic	44	broadfin—see sole, rock	- 1
bearded		channel	47
bigfin	44	eurlfin—see sole, curlfin	
black			47
blackbelly	44	diamond—see turbot, diamond	
blackmouth	44		47
Newfoundland		English—see sole, English	
pale		eyed	46
pallidhlashwarth	44	fantail—see sole, fantail	
pearly—see eelpout, blackmouth	4.4	flathead—see sole, flathead	4 =
polar			47
snakehead		fringe—see sole, sand fringed	46
wattled	44	Georges Bank—see flounder, winter	40
wolf	44	gray	47
eelpouts		gulf	
eels, conger	19		$\overline{46}$
freshwater		hornyhead—see turbot, hornyhead	
mustard		lemon—see sole, English	
snake		longfin-see sole, rex	
snipe	19	longjaw—see flounder, arrowtooth	
spiny		Mexican	
escolar		ocellated	
eulachon	12	peacock	
\mathbf{F}		pelican	40
fallfish	17	pointed-nose—see sole, English rock—see sole, rock	
fatback—see menhaden	11	roundnose—see sole, petrale	
fathead—see sheephead, California		sash	47
filefish, common—see filefish, planehead		sand—see flounder, gulf; sole, sand	•
dotterel		scalyfin—see sole, butter	
fringed			47
lettered—see filefish, scrawled		shrimp	47
longtail—see filefish, scrawled		slender—see sole, slender	
orange	48		47
orangespotted		slime—see sole, Dover	
planehead		slippery—see sole, Dover	
pygmy	49	smallmouth	46

flounder, smooth	47	0	33
southern		garpike—see gar	
spiny	46	gars	10
spotfin		gaspereau—see alewife	
starry	47	gaspergou—see drum, freshwater	
summer	47	ghostfish—see wrymouth	
three-eye	46	globefish	41
winter	47	see also sunfish, ocean	
witch	47	goatfish, dwarf	32
yellowtail	47	Mexican	
flounders, lefteye	46	red	
righteye	47	spotted	32
fluke, fourspot—see flounder, fourspot		yellow	31
gulf—see flounder, gulf		goatfishes	
southern—see flounder, southern		gobies	
summer—see flounder, summer		goby, arrow	35
flyingfish, Atlantic	20	banner	36
bandwing	20	bay	
blackwing		bearded	
bluntnose	21	blind	
California		bluebanded	
clearwing		bluespot	
fourwing	21	bridled	
margined	20	cheekspot	
oceanic two-wing	21	clown	
sailfin	21	code	
sharpchin	21	$\operatorname{crested}$	
smallwing	21	darter	
spotfin		$\operatorname{emerald} \dots \dots \dots \dots$	36
tropical two-wing	21	finescale—see goby, bay	
flyingfishes	20	freshwater	36
foolfish—see filefish		frillfin	
fringehead, onespot	43	goldspot	36
sarcastic		green	36
yellowfin	43	halfblind	
frogfish, longlure	50	highfin	36
ocellated		largescale—see goby, bluespot	
roughjaw	50	longjaw—see mudsucker, longjaw	
singlespot	50	longtail	
splitlure		lyre	36
frostfish—see tomcod, Atlantic; white-		marked	
fish, round		naked	
G		neon	35
G		notchtongue	
gag	25	orangespotted	36
gambusia, Big Bend	22		36
blotched		river	
Clear Creek		seaboard	
largespring		Seminole	36
Pecos	22	shadow	
gar, alligator		sharptail	36
Florida		slim	36
longnose	10	small mouth	
saltwater—see needlefish		sponge	36
shortnose	10	spottail	36
silver—see needlefish		tidewater	35
spotted	10	tiger	36
garfish—see needlefish, California		twoscale	36

goby, violet	burro
white-eye	Caesar
whiteline	common—see grunt, white
zebra	French
goggle-eye—see bass, rock; scad, bigeye	redmouth-see tomtate
goggler—see scad, bigeye	smallmouth
goldeye12	
goldfish	white
Catalina—see garibaldi	yellow — see grunt, bluestriped; grunt,
ocean—see garibaldi	French
goody-see spot	gruntfish—see sculpin, grunt
goosefish	grunts 30
goosefishes	guaguanche
goujon—see catfish, flathead	guitarfish, Atlantic 8
graveldiver	banded 8
graveldivers 44	California—see guitarfish, shovelnose
grayback—see alewife	mottled—see guitarfish, banded
grayfish—see dogfish	shovelnose 8
grayling, Arctic	guitarfishes 8
Montana—see grayling, Arctic	gunnel, banded
graylings	Bering 43
graysby	crescent
greenfish—see opaleye	kelp 43
greenling, Alaska—see greenling, masked	penpoint 43
common—see greenling, whitespotted	red 43
fringed—see greenling, rock	rock 43
kelp 38	
longspine—see combfish, longspine	saddleback
masked 38	
20	man nole 49
painted	
red-see greenling, rock	gurnard, flying
red-see greenling, rock rock	gurnard, flying
red-see greenling, rock rock 38 whitespotted 38	gurnard, flying
red-see greenling, rock rock 38 whitespotted 38 greenlings 38	gurnard, flying
red-see greenling, rock rock 38 whitespotted 38 greenlings 38 grenadiers 22	gurnard, flying
red-see greenling, rock 38 rock 38 whitespotted 38 greenlings 38 grenadiers 22 grindle—see bowfin	gurnard, flying
red-see greenling, rock 38 rock 38 whitespotted 38 greenlings 38 grenadiers 22 grindle—see bowfin 25 grouper, black 25	gurnard, flying
red-see greenling, rock rock	gurnard, flying
red-see greenling, rock rock 38 whitespotted 38 greenlings 38 grenadiers 22 grindle—see bowfin 25 grouper, black 25 broomtail 25 gulf 25	gurnard, flying
red-see greenling, rock rock 38 whitespotted 38 greenlings 38 grenadiers 22 grindle—see bowfin 25 broomtail 25 gulf 25 marbled 25	gurnard, flying
red-see greenling, rock rock 38 whitespotted 38 greenlings 38 grenadiers 22 grindle—see bowfin 25 broomtail 25 gulf 25 marbled 25 misty 25	gurnard, flying
red-see greenling, rock rock 38 whitespotted 38 greenlings 38 grenadiers 22 grindle—see bowfin 25 broomtail 25 gulf 25 marbled 25 misty 25 Nassau 25	gurnard, flying
red-see greenling, rock 38 rock 38 whitespotted 38 greenlings 38 grenadiers 22 grindle—see bowfin 25 broomtail 25 gulf 25 marbled 25 misty 25 Nassau 25 red 25	gurnard, flying
red-see greenling, rock 38 rock 38 whitespotted 38 greenlings 38 grenadiers 22 grindle—see bowfin 25 broomtail 25 gulf 25 marbled 25 nisty 25 Nassau 25 red 25 rock—see bocaccio 25	gurnard, flying
red-see greenling, rock 38 rock 38 whitespotted 38 greenlings 38 grenadiers 22 grindle—see bowfin 25 grouper, black 25 broomtail 25 gulf 25 marbled 25 nisty 25 Nassau 25 red 25 rock—see bocaccio salmon—see bocaccio	gurnard, flying
red-see greenling, rock 38 rock 38 whitespotted 38 greenlings 38 grenadiers 22 grindle—see bowfin 25 grouper, black 25 broomtail 25 gulf 25 marbled 25 Nassau 25 red 25 rock—see bocaccio salmon—see bocaccio sicklefin—see grouper, marbled	gurnard, flying
red-see greenling, rock 38 rock 38 whitespotted 38 greenlings 38 grenadiers 22 grindle—see bowfin 25 grouper, black 25 broomtail 25 gulf 25 marbled 25 Nassau 25 red 25 rock—see bocaccio 25 salmon—see bocaccio 30 sicklefin—see grouper, marbled 25 snowy 25	gurnard, flying
red-see greenling, rock 38 rock 38 whitespotted 38 greenlings 38 grenadiers 22 grindle—see bowfin 25 grouper, black 25 broomtail 25 gulf 25 marbled 25 nisty 25 Nassau 25 red 25 rock—see bocaccio 25 salmon—see bocaccio 36 sicklefin—see grouper, marbled 25 tiger 25	gurnard, flying
red-see greenling, rock 38 rock 38 whitespotted 38 greenlings 38 grenadiers 22 grindle—see bowfin 25 grouper, black 25 broomtail 25 gulf 25 marbled 25 nisty 25 Nassau 25 red 25 rock—see bocaccio 25 salmon—see bocaccio 36 sicklefin—see grouper, marbled 36 snowy 25 tiger 25 Warsaw 25	gurnard, flying
red-see greenling, rock 38 rock 38 whitespotted 38 greenlings 38 grenadiers 22 grindle—see bowfin 25 grouper, black 25 broomtail 25 gulf 25 marbled 25 nisty 25 Nassau 25 red 25 rock—see bocaccio 25 sicklefin—see grouper, marbled 25 snowy 25 tiger 25 Warsaw 25 yellowedge 25	gurnard, flying 41 gurnards, flying 41 H H hackleback—see sturgeon, shovelnose haddock 22 hagfish, Atlantic 6 Pacific 6 hagfishes 6 hake, Carolina 22 gulf 22 longfin 22 mud—see hake, white 22 silver 22 southern 22 spotted 22 squirrel 22 white 22
red-see greenling, rock 38 rock 38 whitespotted 38 greenlings 38 grenadiers 22 grindle—see bowfin 25 prouper, black 25 broomtail 25 gulf 25 marbled 25 misty 25 Nassau 25 red 25 rock—see bocaccio 25 salmon—see bocaccio 38 sicklefin—see grouper, marbled 25 warsaw 25 yellowedge 25 yellowfin 25	gurnard, flying 41 gurnards, flying 41 H H hackleback—see sturgeon, shovelnose haddock 22 hagfish, Atlantic 6 black 6 Pacific 6 hagfishes 6 hake, Carolina 22 gulf 22 longfin 22 mud—see hake, white 22 silver 22 southern 22 spotted 22 squirrel 22 white 22 hakes 22
red-see greenling, rock 38 rock 38 whitespotted 38 greenlings 38 grenadiers 22 grindle—see bowfin 25 prouper, black 25 broomtail 25 gulf 25 marbled 25 misty 25 Nassau 25 red 25 rock—see bocaccio 25 salmon—see bocaccio 38 sicklefin—see grouper, marbled 25 warsaw 25 yellowedge 25 yellowfin 25 yellowmouth 25	gurnard, flying 41 gurnards, flying 41 H H hackleback—see sturgeon, shovelnose haddock 22 hagfish, Atlantic 6 Pacific 6 hagfishes 6 hake, Carolina 22 gulf 22 longfin 22 mud—see hake, white 22 Pacific 22 silver 22 southern 22 squirrel 22 white 22 hakes 22 halfbeak 20
red-see greenling, rock 38 rock 38 whitespotted 38 greenlings 38 grenadiers 22 grindle—see bowfin 25 grouper, black 25 broomtail 25 gulf 25 marbled 25 misty 25 Nassau 25 red 25 rock—see bocaccio 25 salmon—see bocaccio 25 sicklefin—see grouper, marbled 25 snowy 25 tiger 25 yellowedge 25 yellowmouth 25 grubby 40	gurnard, flying 41 gurnards, flying 41 H H hackleback—see sturgeon, shovelnose haddock 22 hagfish, Atlantic 6 Pacific 6 hagfishes 6 hake, Carolina 22 gulf 22 longfin 22 mud—see hake, white 22 Pacific 22 silver 22 southern 22 spotted 22 squirrel 22 white 22 hakes 22 halfbeak 20 California 20
red-see greenling, rock 38 rock 38 whitespotted 38 greenlings 38 grenadiers 22 grindle—see bowfin 25 grouper, black 25 broomtail 25 gulf 25 marbled 25 misty 25 Nassau 25 red 25 rock—see bocaccio 25 salmon—see bocaccio 25 sicklefin—see grouper, marbled 25 snowy 25 tiger 25 yellowedge 25 yellowmouth 25 grubby 40 grunion, California 46	gurnard, flying
red-see greenling, rock 38 whitespotted 38 greenlings 38 grenadiers 22 grindle—see bowfin 25 grouper, black 25 broomtail 25 gulf 25 marbled 25 nisty 25 Nassau 25 red 25 rock—see bocaccio 25 salmon—see bocaccio 25 sicklefin—see grouper, marbled 25 snowy 25 tiger 25 Warsaw 25 yellowedge 25 yellowmouth 25 gruby 40 grunion, California 46 grunt, barred 30	gurnard, flying 41 gurnards, flying 41 H H hackleback—see sturgeon, shovelnose haddock 22 hagfish, Atlantic 6 black 6 Pacific 6 hagfishes 6 hake, Carolina 22 gulf 22 longfin 22 mud—see hake, white 22 Pacific 22 silver 22 southern 22 spotted 22 squirrel 22 white 22 hakes 22 halfbeak 20 California 20 flying 20 hardhead 20
red-see greenling, rock 38 whitespotted 38 greenlings 38 grenadiers 22 grindle—see bowfin 25 grouper, black 25 broomtail 25 gulf 25 marbled 25 misty 25 Nassau 25 red 25 rock—see bocaccio 25 salmon—see bocaccio 25 sicklefin—see grouper, marbled 25 snowy 25 tiger 25 yellowedge 25 yellowmouth 25 grubby 40 grunion California 46 grunt barred 30 black 30	gurnard, flying 41 gurnards, flying 41 H hackleback—see sturgeon, shovelnose haddock 22 hagfish, Atlantic 6 black 6 Pacific 6 hagfishes 6 hake, Carolina 22 gulf 22 longfin 22 mud—see hake, white 22 Pacific 22 silver 22 southern 22 spotted 22 squirrel 22 white 22 hakes 22 halfbeak 20 California 20 flying 20 hardhead 20 longfin 20
red-see greenling, rock 38 whitespotted 38 greenlings 38 grenadiers 22 grindle—see bowfin 25 grouper, black 25 broomtail 25 gulf 25 marbled 25 nisty 25 Nassau 25 red 25 rock—see bocaccio 25 salmon—see bocaccio 25 sicklefin—see grouper, marbled 25 snowy 25 tiger 25 Warsaw 25 yellowedge 25 yellowmouth 25 gruby 40 grunion, California 46 grunt, barred 30	gurnard, flying 41 gurnards, flying 41 H H hackleback—see sturgeon, shovelnose haddock 22 hagfish, Atlantic 6 black 6 Pacific 6 hagfishes 6 hake, Carolina 22 gulf 22 longfin 22 mud—see hake, white 22 Pacific 22 silver 22 southern 22 spotted 22 squirrel 22 white 22 hakes 22 halfbeak 20 California 20 flying 20 hardhead 20

halfmoon		hornpout—see bullhead	
halfmoons	32	horse-mackerel—see mackerel, jack	
halibut, arrowtooth—see flounder, arrow-		houndfish	20
tooth		_	
Atlantic	47	I	
California		idiot—see rockfish, channel	
Greenland		inconnu	12
northern—see halibut, Pacific		incomit	12
Pacific	47	J	
		jack, almaco	20
hamlet, butter			
mutton	25	bar	
see also grouper, marbled; grouper,		black	
Nassau	_	bluntnose	30
hammerhead, great	7	common—see jack, crevalle	
scalloped	7	cottonmouth	
smooth	8	crevalle	
handsawfish—see lancetfish, Pacific		green	29
hardhead	14	horse-eye	29
see also croaker, Atlantic		Spanish—see runner, rainbow	
hardtail—see runner, blue		yellow	29
harvestfish, northern	45	jackfish—see pike, northern	
southern	45	jackknife-fish	31
headfish—see sunfish, ocean; mola, sharp-		jack-ma-riddle—see ladyfish	-
tail		jacks	20
herring—see also queenfish		jacksmelt	
Atlantic	10	jambeau	
Atlantic round			
Atlantic thread		jawfish, banded	41
	10	dusky	
bigeye—see ladyfish	10	longtail	
blueback	10	mottled	
branch—see alewife	10	Pensacola	
California round		spotfin	
dwarf	10	swordtail	
	10	yellowhead	41
glut—see herring, blueback		jawfishes	
Japanese—see herring, round		jawless fishes	
lake	11	jenny, silver	30
see also cisco, least		jewfish	25
moon—see mooneye		see also sea bass, giant	
Pacific	10	black—see grouper, Warsaw	
Pacific thread	10	spotted—see jewfish	
sea—see herring, Atlantic		Joe Brown—see lizardfish	
	10	John Dory, American	24
summer—see herring, blueback		Johnny, tidepool—see sculpin, tidepool	
herrings	10	jugfish	49
highbrow—see prowfish		jumprock, bigeye	
hind, brown—see graysby		black	18
	25	greater	
	$\frac{25}{25}$	striped	
speckled		•	10
hitch		K	
hogchoker		Irolnfish sae also greenling Iroln	
		kelpfish—see also greenling, kelp	42
hogfish	94		
see also pigfish	99	giant	
red	ეე ეე		
Spanish		scarlet	
spotfin	చ	spotted	
hogmolly—see sucker, hog		striped	42

killifish, Ash Meadows	21	lampreys	6
banded	21	lance, American sand	41
bass—see killifish, striped		northern sand	41
bayou		Pacific sand	41
bluefin		lances, sand	41
California	21	lancetfish, longnose	-13
common—see mummichog		Pacific	13
diamond		lancetfishes	13
goldspotted	21	lanternfishes	13
gulf		launce—see lance, sand	
least		lawyer—see burbot	
longnose		leatherfish—see filefish	
marsh	21	leatherjacket	30
Pacific—see killifish, California		lemonfish—see cobia	
Pahrump		ling—see burbot; hake	
plains	21	lingcod	38
pygmy		lionfish	36
Railroad Valley	21	liparid, continuous-finned—see snailfish,	
rainwater		showy	
Rio Grande		Juan de Fuca—see snailfish, slipskin	
Seminole		prickly—see snailfish, prickly	
speckled		ring-tailed—see snailfish, ringtail	
spotfin	21	shore—see snailfish, tidepool	
striped		tadpole—see snailfish, tadpole	
Waccamaw		livebearers	22
White River	21	liza	
killifishes	21	lizardfish, California	13
king, silver—see louvar; tarpon		inshore	13
kingfish—see also croaker, white; mack-		largescale	13
erel, king		offshore	
gulf		red	
northern	31	shortjaw	13
southern		smallscale	13
king-of-the-salmon	24	lizardfishes	13
king-whiting—see kingfish		loaches	18
kiver—see pumpkinseed		loche—see burbot	
kiyi	11	logperch	29
kokanee	11	logperch, Roanoke	
see also salmon, sockeye		lookdown	30
L		lord, brown Irish	39
—		red Irish	39
adyfish	10	yellow Irish—see lord, brown Irish	
Lafayette—see spot		louvar	
amprey, Allegheny brook	6	louvars	35
American brook	6	lumpfish	41
Arctic	6	lumpfishes	41
chestnut	6	lumpsucker—see also lumpfish	
least brook	6	Arctic	41
mountain brook	6	Atlantic spiny	41
northern brook	6	leatherfin	41
Ohio	6	Newfoundland spiny	41
Pacific	6	Pacific spiny	
river	6	smooth	41
sea	6	M	
silversouthern brook	6		1.0
threatesthad—see lampros Desite	6	machete	10
threetoothed—see lamprey, Pacific	c	mackerel, American — see mackerel,	
western brook	6	Pacific	

mackerel, Atka	38	gulf—see menhaden, largescale	
Atlantic	35	largescale	10
blue—see mackerel, Pacific		midshipman, Atlantic	49
bull's eye—see mackerel, chub		northern	49
chub	35	slim	49
Florida—see cero		miller's thumb—see sculpin, mottled	
frigate	34	minkfish	31
green—see mackerel, Pacific		minnow, bluntnose	16
horse—see mackerel, jack; tuna, bluefin		brassy	14
jack	30	bullhead	16
king	35	cutlips	
see also cero		cypress	14
Monterey Spanish	35	desert—see pupfish, desert	
Pacific	35	Devils River	13
painted—see cero	00	fathead	16
snake	34	Kanawha	16
snap—see bluefish	O1	Lake Eustis	21
Spanish	35	loach	17
	50	Ozark	13
see also mackerel, jack		pugnose	16
thimble-eye—see mackerel, chub		redfin—see shiner, redfin	10
striped—see mackerel, Pacific	24	riffle	16
mackerels		roundnose	19
snake	34	roundnose	10 01
mackinaw—see trout, lake		sheepshead	19
mademoiselle—see perch, silver	10	silverjaw	10
madtom, black	18	silvery	14
brindled	19	slim	10
Carolina		spottail—see shiner, spottail	1.0
freckled		stargazing	10
least	19	suckermouth	16
margined		tallowmouth—see stoneroller	
mountain			16
orangefin	18	variegated—see minnow, sheepshead	
slender	18	minnows	13
speckled	19	mobula, smoothtail	9
tadpole	18	spinetail	9
major, sergeant	33	mojarra, bigeye	30
mako		flagfin	30
maneater—see shark, white		mottled	30
man-of-war fish	45	slender	30
manta, Atlantic	9	spotfin	30
Pacific		striped	30
mantas	9	yellowfin	30
margate	30	mojarras	30
black	30	mola—see also sunfish, ocean	
maria—see burbot	30	sharptail	49
marlin, barred—see marlin, striped		slender	49
black	35	molas	49
blue		molly, Amazon	$\overline{22}$
striped		sailfin	22
	-	Molly Miller	43
white		monkfish—see goosefish	10
marlin-spike		moneye	19
marlinsucker		mooneye	19
maskinonge	12	mooneyes	14
mayfish—see killifish, striped	45	moonfish—see also opah	20
medusafish	45	Atlantic	50
menhaden, Atlantic	10	Pacific	ეს 10
finescale	10	moray, blackedge	13

moray, California	19	ouananiche	11
chain	19	oysterfish—see toadfish, oyster	
goldentail		P	
green		•	
purplemouth		paddlefish	9
pygmy	19	paddlefishes	0
reticulate	19	palometa	30
speckled—see moray, spotted	10	parrotfish, blue	
spotted	19	bluelip	34
viper		bucktooth	34
morays	$\frac{19}{22}$	red—see parrotfish, stoplight	0.4
mosquitofishmossbunker—see menhaden, Atlantic	44	emerald	34
mousefish—see sargassumfish		green—see parrotfish, stoplight	0.4
muddler—see sculpin		purple	- 54 - 9.4
mudfish—see bowfin; mummichog; killi-		queenrainbow	
fish, striped; molly, sailfin		redband	
mudminnow, central	12	redfin	94 94
eastern		redtail	24
Olympic		spotfin	
mudminnows		stoplight	
mudsucker, longjaw		striped	-34
	46	parrotfishes	-34
blueback—see liza		peamouth	
common—see mullet, striped		pearleye, northern	
	46	pearleyes	13
grey—see mullet, striped		pearlfish	45
king—see goatfish, yellow		pearlfishes	45
mountain	46	perch—see also seaperch; surfperch	
• • • • • • • • • • • • • • • • • • • •	46	bay—see perch, black	
silver—see mullet, white		black	33
	46	see also blacksmith; opaleye	
white		blue—see blacksmith; perch, black	
	46	blue-eye—see opaleye	
mummichog		button—see opaleye	
muskellunge	12	Catalina—see blacksmith; opaleye	
muttonfish—see pout, ocean		dwarf	
NT.		dwarf sand	25
N		green—see opaleye; perch, yellow	
needlefish, Atlantic	20	kelp	33
	20	Ocean	31
flat	20	Pacific Oceanpile	
Pacific—see needlefish, California		pirate	
redfin	20	reef	22
needlefishes		Rio Grande	-53 -99
nibblers	32	Sacramento	
niggerfish—see coney		sand	
night sergeant	33	shiner	33
numbfish—see ray, lesser Atlantic		silver	
0		splittail—see seaperch, white	-
0		stump—see sunfish, spotted	
parfish	24	tule	33
parfishes	24	viviparous—see perch, tule	
oilfish		white	25
opah	23	see also perch, silver; drum, freshwat	
ppahs	23	yellow	
ppaleye	32	zebra	

perches		beardless	
perches, pirate		Bering	
permit	30	bigeye	40
peto—see wahoo		blackfin	
pickerel—see also pike, northern; walleye		blacktip	
blue—see pike, blue		bluespotted	41
bulldog—see pickerel, redfin		cutfin	41
chain	12	fourhorn	40
eastern—see pickerel, chain		longnose	40
grass	12	northern spearnose	
mud—see pickerel, grass		pricklebreast	
redfin	12	pygmy	
yellow—see walleye		sawback	
pigfish	31	southern spearnose	
pike, blue		stripefin	
northern		sturgeon	
Oregon—see squawfish, northern		tubenose	
Sacramento—see squawfish, Sacra-		warty	
mento		poachers	
sand—see sauger		poggie—see perch, shiner	10
pikeblenny, bluethroat	49		
orangethroat		pogy—see surfperch, redtail; men-	
pikeperch, blue—see pike, blue	42	haden, Atlantic	
pikeperch, blue—see pike, blue pikeperch, yellow—see walleye		pollack—see pollock	99
pikeperch, yellow—see walleye	10	pollock	90
pikes	12	walleye	22
pilchard—see also sardine, Pacific	10	pollyfish—see parrotfish	20
false	10	pomfret	
redear—see sardine, redear		bigscale	
pilot, cockeye—see beaugregory; ser-		pomfrets	
geant major	0.0	pompano	30
pilotfish		African	29
pinfish	32	California—see pompano, Pacific	
longspine—see porgy, longspine		common—see pompano	
spottail		gafftopsail	30
pipefish, banded		see also palometa	
barred	23	great—see permit	
bay	23	Ĭrish	30
bull		Pacific	
chain	23	paloma	30
crested	23	round—see permit	
dusky	23	pompanos	29
fringed	23	pompon—see margate, black	
gulf		porbeagle	-7
insular		porcupinefish	49
kelp	23	porcupinefishes	49
northern	23	porgies	32
opossum	~ ~	porgy—see also scup; surfperch, redtail	
pugnose	23	grass	32
sargassum	~ ~		32
shortfin			32
snubnose		littlemouth—see porgy, sheepshead	
swivelhead		longspine	32
whitenose	$\frac{23}{23}$		$\frac{32}{32}$
pipefishes			$\frac{32}{32}$
plaice, Alaska			$\frac{32}{32}$
American		shad—see porgy, grass	ت
Canadian—see plaice, American	11	sheepshead	$\overline{32}$
poacher, Atlantic	40	silver	
powerior, mumilion	10	δ11 γ Cl	.,_

porgy, whitebone	32	giant butterfly—see ray, spiny	
porkfishpout, ocean	50 44	butterfly lesser butterfly—see ray, smooth	
prickleback, black		butterfly	
	44	lesser electric 8	2
	11	Pacific electric	
	44	round sting—see stingray, yellow)
	44		9
	14		9
priestfish—see rockfish, blue	T.T		9
	45		9
Promise and the second	45	1 0	J
pro militare de la constanta d		whip—see ray, bullnose rays, eagle	n.
Pater		rays, eagle	
p date of the contract of the	49 40	razorfish, green	-
is carried joint to the contract of the contra	$\frac{49}{49}$		
Chocker Court of the Court of t		pearly	
111111111111111111111111111111111111111	49	rosy	t
	49	redeye—see bass, rock	_
		redfish	6
I and I are a second and I are a	49	see also drum, red; sheephead,	
21100011	1 9	California	
	49	little—see salmon, sockeye	_
panere	49	redhorse, black	_
pug—see parrotfish, rainbow	- -	blacktail	_
p carried and a	27	Carolina	
papara, commence operage	21	copper	3
COSCIONAL CONTRACTOR C	21	eastern—see redhorse, northern	_
201110 11010 11111111111111111111111111	21	golden	
and the primage of the contract of the contrac	21	gray	-
Nevada 2	21	greater	3
C	21	Lahontan 17	7
100 101 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	21	Neuse	3
Salt Creek	21	northern	3
sea—see minnow, sheepshead		river	3
		shorthead	3
Q		silver	
_		smallfin 18	8
queenfish	31	suckermouth	8
quillback	17	V-lip	8
quillfish	44	reef-fish, gray	3
quillfishes	44	yellowtail	3
		remora	3
R		spearfish	
		remoras	3
rabbitfish—see puffer, smooth; burrfish		ribbonfish—see cutlassfish, Atlantie;	
rabirubia—see snapper, yellowtail		jackknife-fish	
	45	California—see king-of-the-salmon	
ragfishes	45	polka-dot	1
rasher—see rockfish, vermilion		scalloped	1
ratfish	9	ribbonfishes	1
	22	rig, sloop—see catfish, gafftopsail	
raven, sea	39	rivercarp, bluntnose—see carpsucker,	
ray, bat—see stingray, bat		highfin	
bullnose	9	rivulus	2
California butterfly	9	roach—see also chub; bluegill	
cownose	9	California	4
devil	9	robin, flying—see gurnard, flying	
see also manta, Atlantic		rock-eel—see blenny, rock	
•		• ,	

rockfish—see also bass, striped Alaskan red—see rockfish, black-	see also rockfish, quillback spinycheeked—see rockfish, shortspine
throat	channel
aurora3	
banded—see rockfish, tiger	squarespot
bigeye—see rockfish, sharpchin	starry
	57 stripetail
see also grouper, black; rockfish,	swordspine
blue	tiger 37
black-and-yellow	turkey red—see rockfish, rasphead
blackbanded—see rockfish, tiger	velvet—see gag
blackgill 3	7 vermilion
blackmouth 3	
blackthroat	
blue 3	
bronzespotted	yellowstripe—see rockfish, China
brown	
see also rockfish, calico	rockfishes
calico 3	
canary 3	7 rockling, fourbeard
China 3	
copper	
coral-red	
cow	
dusky	
fantail—see rockfish, canary	smooth
flag	
gopher	7 roosterfish
grass	
greenspotted	
halfbanded	8 rudd
honeycomb	8 rudderfish—see also chub, Bermuda
kelp	7 banded
lobejaw—see rockfish, splitnose	black—see barrelfish
longjaw—see perch, Pacific Ocean	brown—see medusafish
longspine channel	
northern	7 run, tailor—see bluefish
olive	
oliveback—see rockfish, stripetail	hardtail—see runner, blue
orange—see rockfish, canary	rainbow
orange-red—see rockfish, rosethorn	
orangespotted—see rockfish, quill-	\mathbf{S}
back	sablefish
	7 sablefishes
Puget Sound	
pygmy	8 Florida—see sailfish, Atlantic
quillback 3	7 Pacific
rasphead	7 sailorfish—see sculpin, sailfin
redstripe 3	
rosethorn	
rosy 3	
sharpchin	
shortbelly	7 salmon, Atlantic
shortspine channel	8 black—see cobia
silvergray	
slender—see rockfish, pygmy	chinook
speckled 3	7 chum

salmon, coho	1 highfin
dog—see salmon, chum	hunchback
fall—see salmon, chum	longfin 3ϵ
humpback—see salmon, pink	longsnout
jack—see walleye	mushroom
king—see salmon, chinook	red 30
lake Atlantic	
landlocked	
see also salmon, Atlantic	smoothhead 36
medium red—see sālmon, coho	spinycheek
pink 1	1 spotted
quinnat—see salmon, chinook	scorpionfishes
red—see salmon, sockeye	scotchman—see lingcod
Sebago	1 scrod—see cod, Atlantic; haddock
see also salmon, Atlantic	sculpin—see also scorpionfish, California
silver—see salmon, coho	Aleutian—see sculpin, coastrange
sockeye 1	1 Arctic
spring—see salmon, chinook	Arctic staghorn 39
tyee—see salmon, chinook	bald 39
sanddab, longfin4	
mottled—see sanddab, Pacific	blackfin 40
Pacific	6 bonehead
speckled	6 buffalo 39
sandfish—see also tilefish, sand	bull
belted	6 calico 39
Pacific 4	1 California—see scorpionfish, Cali-
sailfin	l fornia
sandfishes 4	l cirrated—see sculpin, fluffy
sand lance—see lance	coastrange
sardine, California—see sardine, Pacific	Columbia
Pacific	
redear	0 crested
scaled	
Spanish	darter
sargassumfish	see also sculpin, slim
sargo 30	
sauger	
saurel—see mackerel, jack	eagle
sauries	filamented—see sculpin, threadfin
saury, Atlantic	fluffy
Pacific	
sawfish, largetooth 8	
smalltooth	
sawfishes 8	
$scabbardfish \dots 3$ -	globe-headed—see sculpin, mosshead
scad, bigeye 30	great
goggle-eye—see scad, bigeye	grunt
mackerel) hookear 38
Mexican	Hlamath Lake 39
rough 30	
round	
seads	
scamp	$6 longhorn \dots 40$
schoolmaster	
scooter—see barracuda, Pacific	mailed 40
scorpionfish, California	7 Malheur
finescale	7 manacled
goosehead	

sculpin, marbled—see also cabezon		seabass, black—see bass, giant sea	
margined	39	white	31
mosshead	39	seahorse, dwarf	23
mossy—see sculpin, ealieo		offshore	23
mottled	39	northern—see seahorse, spotted	
$northern \dots \dots \dots \dots$		Pacifie	23
Pacific staghorn	40	spotted	23
padded	39	seahorses	23
see also sculpin, bonehead		sea mink—see minkfish	
pit-head	39	seaperch, barred—see surfperch, barred	
Piute	39	black—see perch, black	
plumose—see sculpin, scalyhead		blue—see seaperch, striped	
prickly	39	brown—see perch, kelp	
Puget Sound	40	dusky—see perch, pile	
reticulate	39	forktail—see perch, pile	
ribbed	40	island	33
riffle	39	pink	
rosy		rainbow	
rosylip		rubberlip	
rough		sharpnose	
roughback		shiner—see perch, shiner	00
roughcheek		silver—see perch, pile	
roughspine		striped	33
round-headed—see sculpin, mosshead	10	walleye—see surfperch, walleye	99
roundnose—see sculpin, smoothhead		white	33
saddleback	40	yellowfin—see perch, pile	OO
sailfin		sea-poacher, deep-pitted—see rockhead	
scalyhead		window-tailed—see poacher, northern	
sharpnose		spearnose	
shorthorn			49
Shoshone		searcher	
		searobin, armored	38
silverspotted	20	bandtail	
slim		barred	
		bighead	
slimy	98	blackfin	
smooth—see sculpin, Pacific staghorn smoothgum	40	blackwing	
smoothband	40	bluespotted	58
smoothhead		common—see searobin, northern	90
snubnose		horned	
soft		leopard	
spatulate		lumptail	38
spinyhead		Mexican	
spinynose	39	northern	38
spoonhead		redwing—see searobin, striped	
spotfin		shortfin	
spurcheek		shortwing	
	40	sicklefin	
	40	slenderhead	
	39	spiny	
tidepool	40		38
	39		38
	39		38
Wood River			41
	39	8	41
see also sculpin, spinyhead	0.0		41
	39	1	41
	38	seatrout, bastard—see seatrout, silver	
scup	32	gray—see weakfish	

seatrout, greenling—see greenling, kelp		lemon	7
sand	31	leopard	7
silver	31	see also shark, tiger	
spotted	31	mackerel—see mako; shark, salmou	
white—see seatrout, sand		maneater—see shark, white	
sennet, northern	45	mud—see shark, sixgill	
southern	46	$\operatorname{narrowtooth}$	7
señorita	34	night	7
sergeant major	33	nurse	7
sergeant, night	33	see also shark, Greenland	
rock—see sergeant, night		Pacific angel	8
sergeantfish—see cobia		Pacific sharpnose	7
seven-eleven—see perch, shiner		Pacific sleeper	8
shad, Alabama	10	pilot—see rudderfish, banded	
American	10	rabbit—see ratfish	
gizzard	10	ridgeback—see shark, sickle	
golden—see herring, skipjack	10	roundnose	7
hickory	10	salmon	7
see also shad, gizzard	10	sand	·6
Ohio	10	sandbar	7
threadfin	10	sevengill	6
	10	shovelnose—see bonnethead; guitar-	U
white—see shad, American	10	figh shovelness	
, yellowfin	10	fish, shovelnose sickle	7
shanny	44		7
Aretic	44	silky	6
radiated	44	sixgill	U
shark, Atlantic angel	8	sleeper—see shark, Greenland	7
Atlantic sharpnose	7	smalltail	1
basking	7	smooth-tooth—see shark, finetooth	-
bay	7	soupfin	7
bignose	7	spinner	7
blackfin—see shark, blacktip		spotfin—see shark, blacktip	
blacknose	7	spotted cow—see shark, sevengill	_
blacktip	7	swell	7
blue	7	swiveltail—see shark, thresher	.~
see also shark, bonito		$\operatorname{thresher}$	6
bonito	7	tiger	7
bonnetnose—see bonnethead		whale	7
bramble	8	white	7
brown—see shark, sandbar		whitetip	7
brown eat	7	sharks, angel	8
bull	7	cat	7
bullhead—see shark, horn		cow	6
cat—see shark, leopard; shark, nurse		dogfish	8
cow—see shark, sixgill		frill	-6
cub—see shark, bull		hammerhead	7
dusky	7	horn	6
false eat	7	mackerel	6
filetail cat	7	nurse	7
finetooth	7	requiem	7
fox–see shark, thresher	•	sand	6
full	6	whale	7
frill	U		48
great blue—see shark, blue		CITCUIT COLOR OF THE COLOR OF T	48
great white—see shark, white	0	Williamini	10
Greenland	8	sheefish—see inconnu	34
hammerhead—see hammerhead	C		
horn	6	sheepshead	ა2
kitefin	8	shelleracker—see sunfish, redear	

shellfish—see trunkfish	pugnose
shiner, Alabama	rainbow 15
Altamaha 16	red
Arkansas River	redfin 16
bandfin	redlip 15
bigeye	Red River 15
bigmouth	redside 17
blackehin	ribbon
blacknose	Rio Grande
blackspot	river
blacktail	rosefin
bleeding	rosyface 16
blue	rough
bluenose	Sabine 16
bluestripe	saffron
bluntface	sailfin 15
bluntnose	sand
Brazos	sandbar 16
bridle	satinfin
broadstripe	sharpnose
burrhead14	silver
cherryfin	silverband
Chihuahua	silverstripe
chub	smalleye
eoastal	spotfin
eolorless	spottail
comely	stargazing
eommon	steelcolor
Coosa	swallowtail
crescent	taillight
dusky	Tamaulipas
	Tennessee
Ciliciana in the contract of t	Texas
1101,	Topeka
flagfin	tricolor
8	warpaint
golden	
greenfin	wedgespot 15 weed 16
greenhead	
highfin	
highscale	whitefin 15 whitemouth 14
ironcolor	
Kiamiehi	whitetail
lake—see shiner, emerald	yellow—see perch, shiner yellowfin
longnose	
mimie	silverfish—see tarpon silver-rag
mirror	
mountain	silverside, Atlantic
New River	brook
Ocmulgee	hardhead
Ohoopee	key
Ozark	Mississippi
pallid	reef
pinewoods	rough
plains	tidewater
plateau	Waccamaw
popeye	silversides
pretty	silverspot—see sculpin, silverspotted
Proserpine 16	singingfish—see midshipman

skate, Alaska	8	smoothhound, brown	7
Aleutian		Florida	7
barndoor	8	gray	
Bering	8	sicklefin	7
big	8	smoothtongue, California	12
black	8	snailfish, Bering	41
briar—see skate, clearnose		lobefin	41
California	8	longfin	41
clearnose	8	marbled	41
common—see skate, little		polka-dot	41
flathead	8	prickly	41
freckled	8	ribbon	41
little	8	ringtail	41
longnose	8	showy	41
ocellate		slimy	41
Pacific prickly—see skate, starry		slipskin	41
prickly—see skate, starry; skate,		spotted	41
thorny		tadpole	41
rosette	8	tidepool	41
roughtail	$\check{9}$	snailfishes	41
roundel	9	snakeblenny, fourline	41
sandpaper—see skate, black		Pacific	4.1
smooth	8	snakefish	12
spinytail		snapper—see also bluefish	1.,
spotted—see skate, winter	Ü	black	26
spreadfin	8	blackfin	
starry	$\frac{\circ}{9}$	blue—see bluefish	20
thorny	8	Caribbean red	26
winter		Cuban—see snapper, cubera	40
skates		cubera	26
skilfish		dog	
skilletfish	48	glasseye	
skipjack—see also herring, skipjack;	10	gray	20
tuna, skipjack; saury, Atlantic;		gunmouth—see snapper, blackfin	20
silverside, brook; bluefish		hog—see hogfish	
black	24		oe.
wavyback			
skipper—see saury, Pacific	94	mahogany	20
sleeper, bigmouth	25	mangrove—see snapper, gray	o.c
blue		mutton	
emerald		queen	
fat		redsee also rockfish, rasphead	20
masked		see also rocklish, rasphead	oe.
spinycheek		silk	20
spotted	95 95	spot—see snapper, lane	00
		vermilion	26
sleepers			26
smelt, American			26
	12		
freshwater—see smelt, pond	10		23
longfin	12		23
night	12		25
pond		Cuban—see snook, tarpon	0.1
Sacramento	12		24
silver—see smelt, surf	10		24
surf	12		25
whitebait	12	snooks	
smelts			25
deepsea	12	$\operatorname{freckled}$	26

soaphsh, spotted	common—see squawfish, northern	
soldierfish, bigeye	northern	16
blackbar	Oregon—see squawfish, northern	
cardinal 24	Sacramento	16
soldierfishes	Umpqua	16
sole, American—see hogchoker	squeteague, gray—see weakfish	
arrowtooth—see flounder, arrowtooth	sand—see seatrout, sand	
Bellingham—see sole, butter	silver—see seatrout, silver	
bigmouth	spotted—see seatrout, spotted	
broadfin—see sole, rock	squirrelfish	24
butter	deepwater	
C-O	dusky	
curlfin	longjaw	
deepsea	longspine	
Dover	reef	
English	squirrelfishes	
see also sole, petrale fantail47	stargazer, arrow	
	freckled	
flathead	lancer	
fringe—see sole, sand	northern	
gray—see flounder, winter; flounder,	saddle	
witch	sand	
lemon—see flounder, winter; sole,	smooth	
English	southern	
lined	stargazers	42
naked	sand	
petrale 47	starsnout, gray	40
pointednose—see sole, English	spinycheek	40
rex	stickleback, brook	23
rock	common—see stickleback, threespine	
rough—see plaice, American; sole,	fourspine	23
slender	ninespine	
roundnose—see sole, petrale	threespine	
sand 47	twospine	
scalyfin—see sole, butter		
scrawled	stingaree—see stingray	20
slender 47	stingray, Atlantic	9
slippery—see sole, Dover	bat	9
yellowfin	bluntnose	9
soles	diamond	9
sourbelly—see saury, Pacific		9
sourfish—see saury, Pacific	pelagie	9
	roughtail	
spadefish, Atlantic	round	9
Pacific	southern	9
spadefishes	yellow	9
spearfish, longbill		9
shortbill	stonecat	
spikedace	stoneroller	13
spikefishes	see also sucker, hog	
spinedace, Little Colorado		13
splittail	streaker—see bass, yellow	
spoonbill—see paddlefish	studfish, northern	21
spot	DOGGET TO THE TOTAL THE TOTAL TO THE TOTAL THE TOTAL TO T	21
squaretail, bigeye	stumpknocker—see sunfish, spotted	
smalleye 45	sturgeon, Atlantie	9
squaretails45	common—see sturgeon, Atlantic	
squawfish, Colorado 16	green	9
Columbia—see squawfish, northern	lake	9

sturgeon, Pacific—see sturgeon, white	western—see sucker, Sacramento
pallid 9	white
river—see sturgeon, shovelnose	White River 18
shortnose 9	suckerfish—see also remora
shovelnose 9	slender 48
white 9	white 48
sturgeons9	suckers
sucker, Alabama hog	sunfish, banded 27
black—see sucker, northern hog	banded pygmy 27
blackfin	bantam
blue	blackbanded27
bluehead	bluespotted27
bridgelip	common—see pumpkinseed
coarsescale—see sucker, largescale	dollar 27
Columbia finescale—see sucker,	Everglades pygmy
bridgelip	green
Columbia largescale—see sucker, large-	longear
scale	mud
Columbia smallscale—see sucker,	ocean
bridgelip	Okefenokee pygmy
common—see sucker, white	orangespotted
finescale—see sucker, longnose	peacock—see flier
flannelmouth	red—see sunfish, spotted
Gila	redbreast
green	redear
harelip	round—see flier
highfin—see carpsucker, highfin	sharptail ocean—see mola, sharptail
humpback	spotted
June	yellowbelly—see sunfish, redbreast
Klamath largescale	sunfishes
Klamath smallscale	surffish—see corbina, California; croaker,
Lahontan	yellowfin
largescale	surfperch, barred
longnose	calico
Lost River	redtail
Missouri—see sucker, blue	silver
Modoc	spotfin
mountain	walleye
northern—see sucker, longnose	surfperches
northern hog	surgeon, ocean
razorback—see sucker, humpback	surgeonfish, gulf
Rio Grande	surgeonfishes
river—see redhorse, northern	swampfish
Roanoke hog	swamphsh 22 sweeper, glassy 32
rustyside	sweepers
Sacramento	swellfish—see puffer
Santa Ana	swiveltail—see shark, thresher
shortnose	10.1
Sonora	swordfish
spearfish—see marlinsucker	10.1
spotted	
sturgeon—see sucker, longnose	${f T}$
sweet—see chubsucker	tai—see porgy, Pacific
Tahoe	tambor—see rockfish, rasphead
torrent	
Utah	ocean—see surgeon, ocean
Warner 17	tarpon10
webug	
	tarpons 10

$tattler \dots \dots$		triggerfish, common—see triggerfish, gray	7
tautog	34	finescale	
taylor—see bluefish		gray	48
tench	17	ocean	48
tenpounder—see ladyfish; machete		queen	
tetra, Mexican	13	redtail	49
tetras	13	rough	48
thornback	8	sargassum	49
thornhead—see rockfish, channel		spotted	48
threadfin, Atlantic	46	triggerfishes	48
Pacific	46	tripletail	26
yellow	46	tripletails	26
threadfins	46	trout, bastard—see seatrout, silver	
threadfish—see pompano, African		blackspotted—see trout, cutthroat	
thresher, bigeye	6	blueback	
tiger, sand—see shark, sand		brook	
tilefish	29	brown	12
blackline		bull—see Dolly Varden	
sand		cutthroat	11
tilefishes	29	Eastern brook—see trout, brook	
timucu		Gila	
toadfish, gulf	49	golden	11
leopard	49	grey—see trout, lake; weakfish	
oyster		Kamloops—see trout, rainbow	
toadfishes	49	lake	12
tobacco box—see skate, little		Mackinaw—see trout, lake	
togue—see trout, lake		mountain—see trout, cutthroat	
tolly, ocean—see durgon, black		Quebec red	
tomcod—see also hake, southern		rainbow	11
Atlantic	22	rock—see greenling, kelp	
Pacific		sand—see seatrout, sand	
tomtate	30	sea—see also greenling, kelp; sea-	
tonguefish, blackcheek		trout, spotted	
California		speckled—see trout, brook	
deepwater	48	steelhead	11
largescale	48	see also trout, rainbow	
longtail		summer—see weakfish	10
northern		Sunapee	12
offshore		see also char, Arctic	
pygmy		white—see char, Arctic; seatrout, sand	
spottail	40	winter—see seatrout, spotted trout-perch	24
spottedfin		Columbia—see sand roller	24
tonguefishestopminnow—see also mosquitofish	40	trout-perches	94
banded	21	trouts	11
blackspotted		trumpetfish	
blackstripe		trumpetfishes	
Gila		trunkfish	49
golden		horned—see cowfish	10
plains		smooth	49
saltmarsh		spiny	$\overline{49}$
starhead		spotted	49
whiteline		trunkfishes	49
topsmelt			
torpedo, Atlantic	_	tube-eyes	
Pacific—see ray, Pacific electric	-	tube-snout	23
treefish	38	tube-snouts	

tuna, Atlantic—see tuna, bluefin	lake 11
bigeye35	Menominee—see whitefish, round
blackfin	mountain
bluefin	ocean
little34	
	pygmy
skipjack	Rocky Mountain—see whitefish,
striped—see tuna, skipjack	mountain
yellowfin	round
tunas	whitefishes
turbot, California—see sole, curlfin	whiting—see also hake, silver; pollock,
C-O—see sole, C-O	walleye
common—see triggerfish, gray	California—see corbina, California
curlfin—see sole, curlfin	sand—see windowpane
diamond	windowpane 47
hornyhead	wolf-eel
Nassau—see triggerfish, queen	wolffish—see also lancetfish, Pacific
sharpridge—see turbot, hornyhead	Atlantic 43
spotted	Bering
tyee—see salmon, chinook	northern
cyce soo samon, emioon	spotted
${f v}$	wolffishes
·	wormfish, pink
Varden, Dolly	pugjaw
WE!	wormfishes
\mathbf{W}	woundfin
wahoo	wrasse, blackear
snake—see wahoo	elown 34
walleye29	ereole
warmouth	
	dwarf
Warsaw—see grouper, Warsaw	greenband
weakfish	painted
spotted—see seatrout, spotted	rock
weatherfish, oriental	yellowhead
wenchman	wrasses
whalesucker	wreckfish
whiff, bay	wrymouth 44
horned	dwarf 44
spotted	giant 44
whipray—see ray, spotted eagle	Y -
whitebait—see silverside	•
whitefish—see also wolffish, Atlantie	Y-blenny
Bear Lake	
	yellowtail 30
Bonneville	yellowtail
broad 11	see also flounder, yellowtail; snap-



PART III

Index to Scientific Names

Names of classes, orders, and families appear in roman; those of genera and species in italics.

\mathbf{A}		Chilomycterus	49
Ablennes	20	Elops	10
Abudefduf	~ ~	$Gambusia \dots \dots \dots \dots$	22
		Hirundichthys	21
abyssicola, ProsopiumAcantharchus		agassizi, Chologaster	22
		Scorpaena	36
Acanthemblemaria	8	aggregata, Cymatogaster	33
acanthias, Squalus	_		
Acanthocybium	34	Agonidae	40
Acanthopterygii	24		40
Acanthostracion—see Lactophrys	0.4	Agonostomus	46
Acanthuridae	34	Agonus	
A can thurus	34	Agosia	13
Achirus	47	aguabonita, Salmo	11
Acipenser	9	Ahlia	
Acipenseridae	9	alabamae, Alosa	10
Acipenseriformes	9	alalunga, Thunnus	35
acipenserinus, Agonus	40		40
ackleyi, Raja	8	alascanus, Sebastolobus	28
Acrocheilus	13	alatus, Prionotus	38
acronotus, Carcharhinus	7	albacares, Thunnus	
acros, Eremichthys	13	albeolus, Notropis	
aculeatus, Gasterosteus	23		
Halieutichthys	50	albescens, Remorina	25
Prognathodes		albicans, Istiophorus	
Stenotomus—see $chrysops$, S .		albida, Makaira	- 49
acuminatus, Equetus	31	albigutta, Kathetostoma	17
Etrumeus		Paralichthys	92
Myrichthys		albirostris, Corythoichthysalbolineatus, Fundulus	20 91
acus, Strongylura		albamia Notrania	1.1
acuticeps, Clinocottus	39	alborus, Notropis	10
Etheostoma	27	Albulidae	
acutus, Fodiator	21		
Acyrtops	48	album, Haemulon	- 00
Adinia	21	albus, ScaphirhynchusAlectis	$\frac{3}{29}$
adscensionis, Epinephelus	25	alepidota, Chaenopsis	
adspersus, Tautogolabrus		alepidotus, Peprilus	15
aeglefinus, Melanogrammus	22	Alepisauridae	13
aeneus, Myoxocephalus		Alepisaurus	13
aenigmaticus, Icosteus		alcutensis, Lyconcetes	.1.1
aepyptcra, Lampetra		aleutianus, Sebastodes	27
acstivalis, Alosa		aleutica, Raja	برر. پر
Hybopsis		aleuticus, Cottus	20
Aetobatus	9	Allanetta	
afer, Alphestes		alleni, Rathbunclla	19
affinis. Atherinops		alletteratus. Euthunnus	3.1
CETTETODO, ALLIOUT DIOU DO	1()	TARREST TO THE COLUMN AND THE COLUMN ASSESSMENT OF THE COLUMN ASSESSMEN	0

4.13 1.1			
Alloclinus	42	anatirostris, Bembrops	42
Allolumpenus	44	Anchoa	11
Allosmerus	12	Anchoaanchovia, Sardinella	10
Allotriognathi	23	Anchoviella	11
Alopias	6	Ancylopsetta	46
Alosa	10	andersoni, Pristipomoides	26
alosoides, Hiodon	12	Anguilla	19
alpenae, Coregonus	11	anguillicaudatus, Misgurnus	18
Alphestes	25	Anguillidae	19
alpinus, Salvelinus	12	Anguilliformes	10
alta, Pristigenys	$\overline{26}$	anguineum, Chlamydoselachus	- 6
altavela, Gymnura	9	angustirostris, Tetrapturus	35
altima, Carcharhinus	7	Anisotremus	-90
	14	anisurum, Moxostoma	17
altivelis, Sebastolobus		annae Cottue	20
alutaceus, Acrocheilus	12	annae, Cottus	- 07
	48	annularis, Pomoxis	21
abitus Amagan		Prionodes	25
alutus, Apogon	20	annulatus, Sphaeroides	49
Sebastodes		anogenus, Notropis	14
amabilis, Notropis	14	anomalum, Campostoma	13
Ambloplites	27	Anoplagonus	40
amblops, Hybopsis	14	Anoplarchus	44
Amblyopsidae	22	$An oplopoma \dots \dots$	38
Amblyopsis	22	Anoplopomatidae	38
amblyrhynchus, Hemicaranx	30	Antennariidae	50
Ameiurus—see Ictalurus		Antennarius	50
americana, Dasyatis	9		49
	41	Anthias	25
	12	Antigonia	24
	39	antillarum, Chilomycterus	49
Istiophorus—see albicans, I .		Monolene	47
Lophius	49	Apeltes	23
	44	aphododera, Dysomma	20
Menticirrhus		Aphredoderidae	2.1
Polyprion		Aphredoderus	24
	47	A pladinatus	21
Roccus	25	A podes	10
	$\frac{20}{10}$	Apodes	
4 ** 3		Apodichthys	43
	10	apodus, Lutjanus	26
	10		26
	27	Apogonidae	26
	41	approximans, Polydactylus	46
	41	A prionodon	7
amnis, Notropis	14	A pristurus	7
amoenus, Notropis	14	Aprodon	44
Amphiodon—see Hiodon			26
	33	Aptocyclus	41
	22	aquosus, Scophthalmus	47
	33	Archoplites	27
	39	Archosargus	32
Lutjanus	26		12
analogus, Epinephelus	25	Trachipterus	$2\overline{4}$
a fig. 1 fig. 5	14	arctifrons, Calamus	$\frac{1}{32}$
	19		46
	43	Arctogadus	
	43	Arctoscopus	
	43		23

arcuatus, Pomacanthus	32	Thunnus	35
ardens, Ćatostomus		atraria, Gila	
Notropis		atratulus, Rhinichthys	16
arenarius, Cynoscion		atricauda, Symphurus	48
arenatus, Priacanthus	26	atripes, Phanerodon	33
Rypticus	26	atripinne, Etheostoma	97
argentea, Sphyraena		Moxostoma	17
argented, Sphyraena	20		
argenteum, Hyperprosopon		atrocaudalis, Notropis	
argenteus, Amphistichus		atromaculatus, Semotilus	
Diplodus		atropurpureus, Xiphister	44
Eucinostomus		atrovirens, Sebastodes	37
Argentina		audax, Makaira	35
Argentinidae	12	audens, Menidia	46
argentissimus, Plagopterus		auliscus, Syngnathus	23
argi, Centropyge	32	Aulorhynchidae	23
Argyrciosus—see Selene		Aulorhynchus	
Ariidae	18	Aulostomidae	
ariommum, Moxostoma		Aulostomus	
ariommus, Notropis		aurantiaca, Percina	
Arioscopus		auratus, Carassius	
Ariosoma		Mullus	31
armatus, Leptocottus		aureolum, Moxostoma—see macrolepido-	
Artediellus		tum, M.	
artedii, Coregonus	11	aureorubens, Pronotogrammus	25
Artedius		aureus, Pomacanthus	32
Ascelichthys	39	auriculatus, Sebastodes	37
ascensionis, Holocentrus		aurifrons, Ópisthognathus	
A semichthy's		auritus, Lepomis	27
asper, Cottus	39	aurofrenatum, Sparisoma	34
aspera, Acanthemblemaria	42	aurolineatum, Bathystoma	30
Limanda	47		
anarifyona Notronia	14	aurolineatus, Apogon	20
asperifrons, Notropis		aurora, Micrometrus	
asperilinguis, Anthias		Sebastodes	
asperrimus, Cottus	39	aurorubens, Rhomboplites	
Aspicottus—see Enophrys	4.0	australis, Remora	48
Aspidophoroides		autumnalis, Coregonus	
asprella, Ammocrypta		Auxis	34
asprellus, Radulinus	40	avalonis, Antennarius	50
asprigene, Etheostoma	27	averruncus, Kathetostoma	42
Asterotheca	40	Awaous	
Astronotus		axillare, Sparisoma	
Astroscopus		aya, Chaetodon	32
Astyanax		ayresi, Lampetra	- 6
Atheresthes	47	Ayresia—see Chromis	0
Atherinidae		azurea, Hermosilla	29
atherinoides, Chriodorus		,	7
Notropis	14	azureus, Carcharhinus	•
		В	
Atherinomorus	46	n	10
Atherinops	46	Bagre	18
Atherinopsis	46	bahianus, Acanthurus	34
atinga, Chilomycterus	49	baileyi, Crenichthys	
atlantica, Emblemaria	42	Notropis	15
Megalops	10	bairdi, Callionymus	42
Scorpaena	36	Cottus	39
atlanticus, Liparis	41	$Nezumia \dots \dots \dots \dots$	22
Ophioblennius	43	Notropis	15
Tetragonurus		Bairdiella	
- co. wyortar account in the contract of the c	~ ~		

bajonado, Calamus	32	bilobus, Blepsias	39
balao, Hemiramphus	20	binoculata, Raja	8
baldwini, Prionodes	25	binotatus, Apogon	26
Balistes	48	bipinnulatus, Elagatis	30
Balistidae		birostris, Manta	-9
balteatus, Richardsonius	17	bison, Enophrys	39
barbata, Brotula		bivittatum, Diplectrum	25
Pallasina	40	bivittatus, Halichoeres	33
barbatum, Lyconema	44	blackfordi, Lutjanus	26
Barbulifer	35	blanchardi, Neoclinus	43
barracuda, Sphyraena	45	Blenniidae	43
	27	blennioides, Etheostoma	27
bartholomaei, Caranx	29	Blennius	43
bartoni, Aspidophoroides		blennius, Etheostoma	27
Bascanichthys	19	Notropis	15
Bathyagonus	40	Blepsias	39
bathybius, Embassichthys	47	Bodianus	
Bathygobius		boekci, Callionymus	
	12	boleoides, Radulinus	40
Bathymaster	42	Boleosoma—see $Etheostoma$	
Bathymasteridae	42	boleosoma, Gobionellus	36
bathyphilus, Halichocres	33	Bollmannia	35
Bathystoma		bonaci, Mycteroperca	25
Batoidei	8	bonariense, Haemulon	30
Batrachoididae	49	bonasus, Rhinoptera	- 9
Batrachoidiformes	49	boops, Notropis	15
bdellium, Ichthyomyzon	6	borealis, Icelinus	39
beani, Ammocrypta	27	Sphyraena	45
Prionotus	38	Boreogadus	22
beldingi, Cottus	39	bosci, Gobiosoma	36
Bellator	38	bosquianus, Chasmodes	43
bellica, Hybopsis	14	Bothidae	46
	15	Bothragonus	40
belone, Tetrapturus	99 90	Bothus	46
	20	bovinus, Cyprinodon	21
Beloniformes	42	brachycephalus, Corythoichthys	23
		brachychir, Bellator	-38 -20
bendirei, Cottus	39 26	Brachygenys	პU
bergi, Scorpaena	$\frac{36}{41}$	Brachyistius	- 33 - 40
, , , , , , , , , , , , , , , , , , , ,		brachyptera, Remora	48
Holacanthus	45 29	brachypterus, Parexococtus	21
	43	brachysomus, Calamus	
Beryciformes		Brama	
Berycoidei		Brandhiostoridae	-90
	46	Branchiostegidae	29
	48	braniliancia Unminamahaa	$\frac{42}{20}$
	49	brasiliensis, Hemiramphus Narcine	20 8
	$\frac{10}{49}$	Saurida	13
bicolor, Gila	13		$\frac{15}{36}$
Siphateles	17	Scorpaena	
	39	braytoni, Notropisbrazosensis, Notropis	$\frac{15}{15}$
	34	brederi, Pseudogrammus	$\frac{15}{25}$
	15	breviceps, Moxostoma	23 18
	14	brevipes, Lycodes	
bilinearis, Merluccius	$\frac{14}{22}$	brevirostris, Chasmistes	$\frac{17}{17}$
bilineata, Lepidopsetta	47	Negaprion	
		11 0gapi (010.,	

brevirostrum, Acipenser		canadum, Rachycentron	29
brevispinis, Sebastodes		canis, Mustelus	7
<u>Brevoortia</u>		Cantherines	
Brosme			48
brosme, Brosme		Canthigaster	49
Brosmophycis		capellei, Lophotus	
Brotula	45		
Brotulidae	45	caprinus, Stenotomus	32
$brows onneti,\ Gobioides\dots\dots\dots\dots$	36		48
brucus, Echinorhinus	8	caprodes, Percina	29
brunneus, Apristurus	7	Caproidae	24
bubalus, Ictiobus	17	capros, Antigonia	24
buccanella, Lutjanus	26	Carangidae	29
buccata, Ericymba	13	Caranx	
buccula, Notropis		Carapidae	45
buchanani, Notropis			45
bullisi, Holocentrus		· ··· · · · · · · · · · · · · · · · ·	13
burchami, Icelinus	39	carbonarium, Haemulon	30
		Carcharhinidae	7
C		Carcharhinus	7
caballus, Caranx	29	Carcharias	6
Caecula'	19	carcharias, Carcharodon	7
caeruleofasciatus, Bathymaster		Carchariidae	6
caeruleum, Etheostoma		$Carcharodon \dots \dots \dots \dots$	7
caeruleus, Notropis			41
cahni, Hybopsis	14	caribbaea, $Saurida$	13
Calamus			37
calamus, Calamus			18
calcarata, Scorpaena	36	carnatus, Sebastodes	37
californica, Oxyjulis		carolinae, Cottus	39
Šquatina	8	carolinensis, Balistes—see capriscus, B.	
Torpedo	8	carolinus, Prionotus	38
californicus, Cypselurus	20	Trachinotus	30
Mustclus'	7	carpio, Carpiodes	17
Myliobatis	9	Cyprinus	13
Paralichthys	47	$F\"{loridichthys}$	21
californiensis, Atherinopsis	46	Carpiodes	17
Medialuna		carri, Microgobius	36
Syngnathus		caryi, Hypsurus	33
Typhlogobius			-6
Xenistius		castor, Pontinus	36
Callechelys	19	catalinensis, Rhynchocymba	19
Callionymidae	42	cataractae, Rhinichthys	16
Callionymus		catenata, Echidna	19
callisema, Notropis		catenatus, Fundulus	21
callistius, Notropis	4 -	Catostomidae	17
callitaenia, Notropis	15		17
calliurus, Callionymus	42	catostomus, Catostomus	17
Ioglossus	35		16
callyodon, Liparis		catus, Ictalurus	18
calva, Amia		caudalis, Halichoeres	33
Calycilepidotus—see Hemilepidotus		caudilimbatus, Conger	19
campechanus, Lutjanus	26	Caulolatilus	29
Campostoma	13	caurinus, Mylocheilus	14
camurum, Etheostoma	27	Sebastodes	37
camurus, Notropis		cavalla, Scomberomorus	35
canadense, Stizostedion			27

Icelinus		Chloroscombrus	29
cayorum, Anchoa	11	chlorosomum, Etheostoma	27
$Ogilbia \dots \dots \dots \dots$	45	chlorostictus, Sebastodes	37
Cebidichthys	44	Chologaster	22
Centrarchidae	27	Chondrichthyes	6
Centrarchus	27	Chondrostei	9
Centriscidae	23	chordatus, Stylephorus	24
Centrolophus	45	Chriodorus	20
Centropomidae	24	Chromis	33
Centropomus	24	Chrosomus	
Centropristes	25	chrosomus, Notropis	15
Centropyge	32	chrysargyrea, Brachygenys	30
Centroscyllium	8	chrysochloris, Alosa	10
centroura, Dasyatis		chrysogaster, Agosia	13
cepedianum, Dorosoma		chrysomelas, Sebastodes	37
Cephalopholis	25	chrysops, Roccus	26
Cephaloscyllium	7	Stenotomus	39
cephalus, Mugil	46	chrysopterum, Sparisoma	24
cerasinus, Notropis	15	chrysopterus, Orthopristis	21
Ceratacanthus—see Alutera	10	abrusotus Fundulus	31
	44	chrysotus, Fundulus	21
cerdale, Scytalina	45	chrysura, Bairdiella	- 51
cervinum, Lepophidium	45	chrysurus, Chloroscombrus	29
Moxostoma		Microspathodon	33
Cetengraulis		Ocyurus	26
Cetorhinus	7	chuss, Urophycis	22
ceuthoecus, Barbulifer		Cichlasoma	33
Chaenobryttus		Cichlidae	
Chaenopsis	42	ciliaris, Holacanthus	
Chaetodipterus	32	ciliatus, Monacanthus	49
Chaetodon		Sebastodes	37
chaetodon, Enneacanthus	27	cimbrius, Enchelyopus	22
Chaetodontidae		cinereum, $Etheostoma$	27
$chalcogrammus,\ Theragra\dots\dots\dots$	22	cinereus, Gerres	30
chalybaeus, Notropis	15	cingulatus, $Fundulus$	21
chamaeleonticeps, Lopholatilus	29	Paraclinus	43
Characidae	13	cirratum, Ginglymostoma	7
Chascanopsetta	46	cirratus, Urophycis	22
Chasmistes	17	cirrhosus, Blepsias	
Chasmodes		Citharichthys	46
Cheilotrema	31	civitatus, Symphurus	48
chesteri, Phycis	22	clara, Ammocrypta	27
chihuahua, Notropis	15	clarki, Pantosteus	18
chiliensis, Sarda	35	Salmo	11
chiliticus, Notropis	15	clathratus, Paralabrax	$2\overline{5}$
Chilomycterus	49	Clepticus	33
Chimaerae	9	Clevelandia	35
Chimaeridae	9	Clinidae	42
Chimaeriformes	9	Clinocottus	39
Chirolophus	44	Clinostomus	13
chirurgus, Acanthurus			
chirus, Phytichthys	$\frac{34}{44}$	Clupea	10
Chitonotus		clupeaformis, Coregonus	11
chitonotus	39 46	Clupeidae	10
Chlamydosologhidae	46	Clupeiformes	10
Chlamydoselachidae	6	clupeola, Harengula	10
Chlamydoselachus	6	Cobitidae	18
chloristius, Notropis	15	cobitis, Tiaroga	17
chlorocephalus, Notropis	15	coccogenis, Notropis	15

coclestinus, Scarus	34	crassa, Percina	29
coenosus, Pleuronichthys	47	crassicauda, Gila	13
coeruleus, Acanthurus		creaseri, Artedius	39
Scarus		Crenichthys	21
cognatus, Cottus		crinigerus, Micrognathus	23
colburni, Seriola		crinitus, Alectis	
colias, Scomber		Micrognathus	
collapsum, Moxostoma	18	cristatus, Blennius	
colliei, Hydrolagus	9	Trachipterus	24
collis, Etheostoma		Cristivomer—see Salvelinus	~ -
Cololabis	20	crocro, Pomadasys	31
columbianus, Catostomus		croicensis, Scarus	34
comatus, Cypselurus		cromis, Pogonias	31
combatia, Antigonia	24	crossotus, Etropus	46
commersoni, Catostomus	17		44
compressa, Anchoa	11	cruentatum, Petrometopon	25
conchorum, Menidia	46	cruentatus, Priacanthus	26
concolor, Scomberomorus	35	crumenophthalmus, Selar	30
confluentus, Fundulus		Cryptacanthodes	44
Conger	19	Cryptopterygium	19
congestum, Moxostoma		Cryptotomus	34
Congridae	19	Cryptotrema	42
Congrina	19	crysoleucas, Notemigonus	14
conklini, A pogon		crysos, Caranx	29
Caecula	19	cubana, Anchoa	11
connectens, Lethops		cubensis, Squalus	45
conocephalus, Mylopharodon	14	Cubiceps	45
Conodon	30	cujus, Chasmistes	17
constellatus, Sebastodes		cummingsae, Notropis	15
coosae, Etheostoma		curacao, Bathygobius	30
Micropterus	27	curema, Mugil	40
copei, Snyderichthys	17	cuvieri, Galeocerdo	17
copelandi, Percina	29		45
corallinum, Cryptotrema	42	cyanea, Chromis	00 07
corallinus, Artedius	<u>აგ</u>	cyanellus, Lepomis	21
Coregonus	11	cyanoguttatum, Cichlasoma	33
coregonus, Moxostoma	18	cyanophrys, Psencs	90
coriacea, Moapa	14	cyanops, Caulolatilus	20
corinus, Hexanchus—see griseum, H.	99	cyanopterus, Cypselurus	20
cornuta, Chologaster		Luijanus	17
Cornutus, Citharichthys		Cycleptus	46
Notropis	15 21	Cyclopsetta	41
coroides, Umbrina	17	Cyclopterichthys	.11
corporalis, Semotilus		Cyclopteropsis	11
cortezianus, Aprodoncoruscus, Holocentrus	24		41
Coryphaena		- g F	41
Coryphaenidae		cyclostigma, Liparis	41
	35	cylindraceum, Prosopium	11
Coryphopterus	23		33
Cottidae		- gg	29
Cottus	39	-garotacita, z crotitari i i i i i i i i i i i i i i i i i i	48
Couesius	39 14	-) 6	47
coulteri, Prosopium		Cynoscion	
cragini, Etheostoma	$\frac{11}{27}$	cypha, Gila	13
crameri, Hybopsis		cyprinellus, Ictiobus	$\tilde{17}$
Schastodes		Cyprinidae	13

Cypriniformes		Diodontidae	49
Cyprinodon	21	diomedianus, Symphurus	48
Cyprinodontidae	21	Dionda	13
Cyprinodontiformes	21	Diplectrum	25
cyprinoides, Lophogobius		Diplodus	32
Cyprinus		diploproa, Sebastodes	37
cyprinus, Carpiodes	17	dipterurus, Dasyatis	9
Cypselurus	20	Discocephali	48
cypseturas	20	diaman Cammagna	
D		dispar, Scorpaena	36
	4.1	dissimilis, Hybopsis	14
Dactylopteridae	41	ditaenia, Gila	14
Dactylopterus	41	ditropis, Lamna	7
dactylopterus, Helicolenus	36	dodecaedra, Occa	40
Dactyloscopidae		dolichogaster, Pholis	43
Dactyloscopus	42	dolomieui, Micropterus	27
Dalatias	8	Doratonotus	
dalli, Lythrypnus	36	Dormitator	35
Schastodes	37	dormitor, Gobiomorus	35
Dallia	12	Dorosoma	10
Damalichthys—see Rhacochilus		dorsalis, Notropis	15
Dasyatidae	9	Seriola	30
Dasyatis	9	Sphaeroides	49
Dasycottus		dorsopunicans, Eupomacentrus	33
		drummondhayi, Epinephelus	$\frac{35}{25}$
davidsoni, Anisotremus		dubina Ammodutes	41
deani, Paraliparis		dubius, Ammodytes	41
Polistotrema	6	ductor, Naucrates	30
decagonus, Agonus		dumerili, Seriola	30
decagrammus, Hexagrammos		Squatina	-8
Decapterus	29	dunckeri, Syngnathus	23
declivifrons, Vomer		duodecim, Anchoa	11
$Decodon \dots \dots \dots \dots \dots \dots$	33	duquesnei, Moxostoma	18
decurrens, Pleuronichthys	47	duryi, $Etheostoma$	27
delicatissima, Anchoa	11	Dysomma	20
Delolepis	44	Dysommidae	20
delphinus, Pantosteus			
dennyi, Liparis	41	${f E}$	
dentatus, Apsilus	26	earlli, Urophycis	22
Neoscopelarchoides		Echeneidae	
Paralichthys	47	Echeneiformes	48
Pseudupeneus		Echeneis	48
dentex, Odontoscion	31	Echidna	19
Osmerus		Echinorhinus	8
denticulatus, Anarhichas		edwini, Etheostoma	
derjugini, Eumicrotremus		eglanteria, Raja	10
Dermatolepis	$\frac{25}{22}$	egmontis, Ahlia	
Dermatostethus		egregius, Arioscopus	42
diaboli, Dionda		Richardsonius	17
$diabolis, Cyprinodon \dots \dots \dots$		egretta, Bellator	38
diaphana, $Emblemaria$		eigenmanni, Rimicola	48
Lactoria	49	Elacatinus	35
diaphanes, Raja—see ocellata, R.		Elagatis	30
diaphanus, Fundulus	21	elassodon, Hippoglossoides	47
Diapterus	30	Elassoma	27
diapterus, Lycodes		elater, Zalieutes	50
dilatus, Spirinchus	12	elegans, Cyprinodon	21
dilecta, Ancylopsetta		Gibbonsia	42
Diodon		Eleginus	

Eleotridae			
		Esox	
Eleotris		Etelis	26
eleutherus, Noturus		Etheostoma	
ellipticum, Hyperprosopon	33	$etowanum, Hypentelium \dots \dots$	
elongatus, Allosmerus	12	Etropus	46
Clinostomus	13	Etrumeus	
Cycleptus	17	Eucalia	
Ophiodon	38	Eucinostomus	
Sebastodes		Eucyelogobius	-35
Elopidae	10	Euleptorhamphus	20
\widehat{Elops}	10	Eumesogrammus	44
elucens, Syngnathus	23	Eumicrotremus	41
Embassichthys		Eupomacentrus	33
Embiotoca	33	eurystole, Anchoviella	
Embiotocidae	33	eurystomus, Satan	19
Emblemaria		euryzonus, Notropis	15
embryum, Clinocottus		Euthynnus	34
Embryx	44	euzonum, Etheostoma	28
emiliae, Opsopoeodus	16	evergladei, Elassoma	27
emmelane, Agonopsis	40	evermanni, Rhinichthys	16
Empetrichthys	21	Evermannichthys	36
emphaeus, Sebastodes	37	evides, Percina	20
Enchelycore		Plectobranchus	44
Enchelyopus	22	Eviota	
enchrysurus, Chromis	33	evolans, Prionotus	38
Engraulidae	11	Evorthodus	36
Engraulis		exasperata, Zapteryx	8
		exile, Etheostoma	28
Engyophrys	27	exilicauda, Lavinia	14
		exilis, Lyopsetta	47
Enneapterygius		Noturus	19
Enophrys	94	Strongylura	20
ensiferus, Centropomus	49	Exocoetidae	
Emilomacroaus	43		
automolas Cabastadas	97		91
entomelas, Sebastodes	37	Exocoetus	21
entomelas, Sebastodes Entosphenus—see Lampetra		Exocoetus $Exoglossum$	13
entomelas, Sebastodes Entosphenus—see Lampetra Eopsetta	47	Exocoetus	$\frac{13}{20}$
entomelas, Sebastodes	47 13	Exocoetus Exoglossum exsiliens, Cypselurus extensa, Menidia	$\frac{13}{20}$ $\frac{46}{46}$
entomelas, Sebastodes Entosphenus—see Lampetra Eopsettaeos, Chrosomus Sebastodes	47 13 37	Exocoetus	$\frac{13}{20}$ $\frac{46}{46}$
entomelas, Sebastodes. Entosphenus—see Lampetra Eopsetta	47 13 37 32	Exocoetus Exoglossum exsiliens, Cypselurus extensa, Menidia Extrarius	$\frac{13}{20}$ $\frac{46}{46}$
entomelas, Sebastodes. Entosphenus—see Lampetra Eopsetta. eos, Chrosomus. Sebastodes. Ephippidae. Epinephelus.	47 13 37 32 25	Exocoetus Exoglossum exsiliens, Cypselurus extensa, Menidia Extrarius	13 20 46 14
entomelas, Sebastodes. Entosphenus—see Lampetra Eopsetta. eos, Chrosomus. Sebastodes. Ephippidae. Epinephelus. episcopa, Dionda.	47 13 37 32 25	Exocoetus Exoglossum exsiliens, Cypselurus extensa, Menidia Extrarius F faber, Chaetodipterus	13 20 46 14
entomelas, Sebastodes. Entosphenus—see Lampetra Eopsetta	47 13 37 32 25 13	Exocoetus Exoglossum exsiliens, Cypselurus extensa, Menidia Extrarius F faber, Chaetodipterus fabricii, Centroscyllium	13 20 46 14 32 8
entomelas, Sebastodes. Entosphenus—see Lampetra Eopsetta. eos, Chrosomus. Sebastodes. Ephippidae. Epinephelus. episcopa, Dionda. Eques—see Equetus Equetus.	47 13 37 32 25 13	Exocoetus Exoglossum exsiliens, Cypselurus extensa, Menidia Extrarius F faber, Chaetodipterus fabricii, Centroscyllium Lumpenus	13 20 46 14 32 8 44
entomelas, Sebastodes. Entosphenus—see Lampetra Eopsetta. eos, Chrosomus. Sebastodes. Ephippidae. Epinephelus. episcopa, Dionda. Eques—see Equetus Equetus. equisetis, Coryphaena.	47 13 37 32 25 13	Exocoetus Exoglossum exsiliens, Cypselurus extensa, Menidia Extrarius F faber, Chaetodipterus fabricii, Centroscyllium Lumpenus falcata, Seriola	13 20 46 14 32 8 44 30
entomelas, Sebastodes. Entosphenus—see Lampetra Eopsetta	47 13 37 32 25 13 31 30 23	Exocoetus Exoglossum exsiliens, Cypselurus extensa, Menidia Extrarius F faber, Chaetodipterus fabricii, Centroscyllium Lumpenus falcata, Seriola falcatus, Rhinichthys	13 20 46 14 32 8 44 30 16
entomelas, Sebastodes. Entosphenus—see Lampetra Eopsetta	47 13 37 32 25 13 31 30 23 13	Exocoetus Exoglossum exsiliens, Cypselurus extensa, Menidia Extrarius F faber, Chaetodipterus fabricii, Centroscyllium Lumpenus falcata, Seriola falcatus, Rhinichthys Trachinotus	320 46 14 32 8 44 30 16 30
entomelas, Sebastodes. Entosphenus—see Lampetra Eopsetta	47 13 37 32 25 13 31 30 23 13 13	Exocoetus Exoglossum exsiliens, Cypselurus extensa, Menidia Extrarius F faber, Chaetodipterus fabricii, Centroscyllium Lumpenus falcata, Seriola falcatus, Rhinichthys Trachinotus falciformis, Carcharhinus	13 20 46 14 32 8 44 30 16 30 7
entomelas, Sebastodes. Entosphenus—see Lampetra Eopsetta	47 13 37 32 25 13 31 30 23 13 13 38	Exocoetus Exoglossum exsiliens, Cypselurus extensa, Menidia Extrarius F faber, Chaetodipterus fabricii, Centroscyllium Lumpenus falcata, Seriola falcatus, Rhinichthys Trachinotus falciformis, Carcharhinus fasciata, Pholis	32 46 14 32 8 44 30 16 30 7 43
entomelas, Sebastodes. Entosphenus—see Lampetra Eopsetta	47 13 37 32 25 13 31 30 23 13 13 38 14	Exocoetus Exoglossum exsiliens, Cypselurus extensa, Menidia Extrarius F faber, Chaetodipterus fabricii, Centroscyllium Lumpenus falcata, Seriola falcatus, Rhiniehthys Trachinotus falciformis, Carcharhinus faseiata, Pholis Seriola	32 46 14 32 8 44 30 16 30 7 43 30
entomelas, Sebastodes. Entosphenus—see Lampetra Eopsetta. eos, Chrosomus Sebastodes. Ephippidae Epinephelus episcopa, Dionda Eques—see Equetus Equetus equisetis, Coryphaena erectus, Hippocampus Eremichthys Ericymba Erilepis Erimystax Erimyzon	47 13 37 32 25 13 31 30 23 13 13 38 14	Exocoetus Exoglossum exsiliens, Cypselurus extensa, Menidia Extrarius F faber, Chaetodipterus fabricii, Centroscyllium Lumpenus falcata, Seriola falcatus, Rhinichthys Trachinotus falciformis, Carcharhinus fasciata, Pholis Seriola fasciatus, Larimus	32 46 14 32 8 44 30 16 30 7 43 30 31
entomelas, Sebastodes. Entosphenus—see Lampetra Eopsetta. eos, Chrosomus. Sebastodes. Ephippidae. Epinephelus. episcopa, Dionda. Eques—see Equetus Equetus. equisetis, Coryphacna. erectus, Hippocampus. Eremichthys. Ericymba. Erilepis. Erimystax. Erimyzon. erinacca, Raja.	47 13 37 32 25 13 31 30 23 13 13 38 14 17 8	Exocoetus Exoglossum exsiliens, Cypselurus extensa, Menidia Extrarius F faber, Chaetodipterus fabricii, Centroscyllium Lumpenus falcata, Seriola falcatus, Rhinichthys Trachinotus falciformis, Carcharhinus fasciata, Pholis Seriola fasciatus, Larimus Opisthognathus	320 46 14 32 8 44 30 16 30 7 43 30 31 41
entomelas, Sebastodes. Entosphenus—see Lampetra Eopsetta	47 13 37 32 25 13 31 30 23 13 13 38 14 17 8 35	Exocoetus Exoglossum exsiliens, Cypselurus extensa, Menidia Extrarius F faber, Chaetodipterus fabricii, Centroscyllium Lumpenus falcata, Seriola falcatus, Rhinichthys Trachinotus falciformis, Carcharhinus fasciata, Pholis Seriola fasciatus, Larimus Opisthognathus Paraclinus	32 46 14 32 8 44 30 16 30 7 43 30 31 41 43
entomelas, Sebastodes. Entosphenus—see Lampetra Eopsetta	47 13 37 32 25 13 31 30 23 13 13 38 14 17 8 35 42	Exocoetus Exoglossum exsiliens, Cypselurus extensa, Menidia Extrarius F faber, Chaetodipterus fabricii, Centroscyllium Lumpenus falcata, Seriola falcatus, Rhinichthys Trachinotus falciformis, Carcharhinus fasciata, Pholis Seriola fasciatus, Larimus Opisthognathus Paraclinus fecundus, Catostomus	32 46 14 32 8 44 30 16 30 7 43 30 31 41 43 17
entomelas, Sebastodes. Entosphenus—see Lampetra Eopsetta	47 13 37 32 25 13 31 30 23 13 13 38 14 17 8 35 42 13	Exocoetus Exoglossum exsiliens, Cypselurus extensa, Menidia Extrarius F faber, Chaetodipterus fabricii, Centroscyllium Lumpenus falcata, Seriola falcatus, Rhinichthys Trachinotus falciformis, Carcharhinus fasciata, Pholis Seriola fasciatus, Larimus Opisthognathus Paraclinus fecundus, Catostomus felis, Galeichthys	32 46 14 32 8 44 30 7 43 30 31 41 43 17 18
entomelas, Sebastodes. Entosphenus—see Lampetra Eopsetta	47 13 37 32 25 13 31 30 23 13 13 38 14 17 8 35 42 13 17	Exocoetus Exoglossum exsiliens, Cypselurus extensa, Menidia Extrarius F faber, Chaetodipterus fabricii, Centroscyllium Lumpenus falcata, Seriola falcatus, Rhinichthys Trachinotus falciformis, Carcharhinus falciformis, Carcharhinus fasciata, Pholis Seriola fasciatus, Larimus Opisthognathus Paraclinus fecundus, Catostomus felis, Galeichthys fenestralis, Artedius	32 46 14 32 8 44 30 16 30 31 41 43 17 18 39
entomelas, Sebastodes. Entosphenus—see Lampetra Eopsetta	47 13 37 32 25 13 31 30 23 13 13 38 14 17 8 35 42 13 17 18	Exocoetus Exoglossum exsiliens, Cypselurus extensa, Menidia Extrarius F faber, Chaetodipterus fabricii, Centroscyllium Lumpenus falcata, Seriola falcatus, Rhinichthys Trachinotus falciformis, Carcharhinus fasciata, Pholis Seriola fasciatus, Larimus Opisthognathus Paraclinus fecundus, Catostomus felis, Galeichthys	32 46 14 32 8 44 30 16 30 7 43 30 17 18 39 13

fierasfer, Lycodapus	4.1	furcifer, Paranthias	25
filamentosus, Icclinus		furiosus, Noturus	18
fimbria, Anoplopoma	38	fuscus, Syngnathus	
fimbriata, Cyclopsetta	46	fusiforme, Etheostoma	28
fimbriatus, Icclinus		G	
Fistularia			
Fistulariidae		Gadidae	22
flabellare, Etheostoma		Gadiformes	
flammea, Hemitremia	14	Gadus	22
flava, Congrina	19	gagei, Ichthyomyzon	6
flavescens, Perca		gaigei, Gambusia	22
flavidus, A podichthys	43	gaimardiana, Mugil	
Aulorhynchus		gairdneri, Salmo	
Sebastodes		galacturus, Notropis	
flavobrunneum, Lepidocybium		Galeichthys	
flavolimbatus, Epinephelus	∡0 21	Galeocerdo	- (
flavolineatum, Haemulon		Galeorhinus	
flavus, Noturus		Gambusia	
florae, Liparis		garmani, Raja	
floridae, Jordanella		Garmannia	- 90 - 99
floridanus, Carcharhinus		Garrupa—see Epinephelus	99
Microdesmus	36	Gasterosteidae	92
Urophycis		Gasterosteidae	99
Floridichthys	21	Gasterosteus	
focaliger, Menticirrhus	31	Gastropsetta	
Fodiator	21	geiseri, Gambusia	99
foetens, Synodus		gelida, Hybopsis	14
fonticola, Etheostoma		geminatus, Hypleurochilus	
fontinalis, Salvelinus	$\overline{12}$	gemmiferum, Prosopium	
forbesi, Carpiodes		Gempylidae	
forcipatus, Balistes	48	Gempylus	34
formosa, Heterandria	22	gentilis, Hypsoblennius	43
Mollienesia	22	Genyonemus	31
formosum, Diplectrum		Germo—see Thunnus	
fossor, Ichthyomyzon		Gerres	30
francisci, Heterodontus	6	Gerridae	
freminvillei, Myliobatis	9	gibbifrons, Prognichthys	21
frenata, Zaniolepis	38	Gibbonsia	42
frenatus, Brachyistius	33	gibbosus, Lepomis	27
Sarritor	40	gigantea, Delolepis	44
fricksium, Etheostoma	28	gigas, Stereolepis	26
frontalis, Gastropsetta		Gila	13
fryi, Hesperomyrus		$gilae, Salmo \dots \dots \dots \dots \dots$	11
fucensis, Liparis	41	gilberti, Hypsoblennius	43
fucorum, Xererpes		Ilypnus	36
fulgida, Meda	14	Noturus	18
fulva, Cephalopholis	25	Gilbertidia	
fulvescens, Acipenser		Gillellus	42
fumeus, Notropis	15	gilli, Pholis	43
funduloides, Clinostomus		Sebastodes	
Fundulus		Synchirus	
funebris, Gymnothorax	19	Gillichthys	
Noturus	18	Ginglymodi	
furcatus, Cypselurus		Ginglymostoma	
Ictalurus	18 33	ginsburgi, Gobiosoma	36
E BUTDETORION	3.3	araras Notromie	1 12

Girella	32	griseus, Lutjanus	26
Girellidae	32	gronowi, Nomeus	45
glaber, Cyclopterichthys	41	grunniens, Aplodinotus	31
glacialis, Aretogadus	22	guacamaia, Scarus	34
Liopsetta		guachancho, Sphyraena	
gladius, Xiphias	35	gula, Eucinostomus	30
glauca, Prionace	7	gulosus, Chaenobryttus	27
glaucofraenum, Coryphopterus	35	Cottus	39
glaucum, Stizostedion vitreum	29	Microgobius	
glaucus, Isurus	7	gunnellus, Pholis	43
Trachinotus		gunteri, Brevoortia	
glesne, Regalecus	24	Syacium	47
globiceps, Clinocottus	39	guppyi, Labrisomus	43
gloriosus, Enneacanthus	27	gutselli, $Etheostoma$	28
glutinosa, $Myxine$		guttata, Scorpaena	37
Glyptocephalus		guttatus, Astroscopus	42
Gnatholepis	36	Epinephelus	25
Gobiesocidae	48	guttulata, Hypsopsetta	47
Gobiesociformes		Gymnachirus	47
Gobiesox		Gymnelis	
Gobiidae	35	Gymnocanthus	30
		Gymnothorax	
Gobioides		Gymnura	
gobioides, Bembrops	25	gyrinus, Noturus	15
Gobiomorus	36	Gyropleurodus—see Heterodontus	10
Gobionellus		Gyropieurouus—see meierouonius	
Gobiosoma	96	H	
Gobulus	90 90	77 7	20
gomesi, Ophichthus	20	Haemulon	
Gonioplectrus	20	Halecomorphi	96
goodei, Lucania	22	Halichoeres	
Myliobatis	44	Halicutichthys	00
Ptilichthys	44	halleri, Urolophus	ć
Ptilichthys Sebastodes	$\frac{44}{37}$	halleri, Urolophushamiltoni, Manta	(
Ptilichthys	$\frac{44}{37}$	halleri, Urolophushamiltoni, Manta	18
Ptilichthys	44 37 11 19	halleri, Urolophushamiltoni, Manta	18 39
Ptilichthys	44 37 11 19 28	halleri, Urolophushamiltoni, Manta	18 39 14
Ptilichthys	44 37 11 19 28 19	halleri, Urolophus hamiltoni, Manta Moxostoma hankinsoni, Artedius Hybognathus Haplodoci	18 39 14 49
Ptilichthys	44 37 11 19 28 19 45	halleri, Urolophus hamiltoni, Manta Moxostoma hankinsoni, Artedius Hybognathus Haplodoci Harengula	18 39 1- 49 10
Ptilichthys	44 37 11 19 28 19 45 33	halleri, Urolophus hamiltoni, Manta Moxostoma hankinsoni, Artedius Hybognathus Haplodoci Harengula harengus, Clupea harengus	18 39 14 49 10
Ptilichthys	44 37 11 19 28 19 45 33 22	halleri, Urolophus hamiltoni, Manta Moxostoma hankinsoni, Artedius Hybognathus Haplodoci Harengula harengus, Clupea harengus harperi, Hybopsis	18 39 14 49 10 10
Ptilichthys. Sebastodes. gorbuscha, Oncorhynchus. Gordiichthys. gracile, Etheostoma. gracilior, Congrina. gracilis, Cubiceps. Cymatogaster. Eleginus. Hybopsis.	44 37 11 19 28 19 45 33 22 14	halleri, Urolophus hamiltoni, Manta Moxostoma hankinsoni, Artedius Hybognathus Haplodoci Harengula harengus, Clupea harengus harperi, Hybopsis harringtonensis, Allanetta	18 39 14 49 10 10 14 46
Ptilichthys. Sebastodes. gorbuscha, Oncorhynchus. Gordiichthys. gracile, Etheostoma. gracilior, Congrina. gracilis, Cubiceps. Cymatogaster. Eleginus. Hybopsis. Macrorhamphosus.	44 37 11 19 28 19 45 33 22 14 23	halleri, Urolophus hamiltoni, Manta Moxostoma hankinsoni, Artedius Hybognathus Haplodoci Harengula harengus, Clupea harengus harperi, Hybopsis harringtonensis, Allanetta harringtoni, Artedius	18 39 14 49 10 10 14 46 39
Ptilichthys. Sebastodes. gorbuscha, Oncorhynchus. Gordiichthys. gracile, Etheostoma. gracilior, Congrina. gracilis, Cubiceps. Cymatogaster. Eleginus. Hybopsis. Macrorhamphosus. gracillimus, Gobionellus.	44 37 11 19 28 19 45 33 22 14 23 36	halleri, Urolophus hamiltoni, Manta Moxostoma hankinsoni, Artedius Hybognathus Haplodoci Harengula harengus, Clupea harengus harperi, Hybopsis harringtonensis, Allanetta harringtoni, Artedius hastatus, Gobionellus	18 39 14 49 10 14 46 39 36
Ptilichthys. Sebastodes. gorbuscha, Oncorhynchus. Gordiichthys. gracile, Etheostoma. gracilior, Congrina. gracilis, Cubiceps. Cymatogaster. Eleginus. Hybopsis. Macrorhamphosus. gracillimus, Gobionellus. graellsi, Lepophidium	44 37 11 19 28 19 45 33 22 14 23 36 45	halleri, Urolophus hamiltoni, Manta Moxostoma hankinsoni, Artedius Hybognathus Haplodoci Harengula harengus, Clupea harengus harperi, Hybopsis harringtonensis, Allanetta harringtoni, Artedius hastatus, Gobionellus havana, Eucinostomus	18 39 14 49 10 10 14 46 39 36 30
Ptilichthys. Sebastodes. gorbuscha, Oncorhynchus. Gordiichthys. gracile, Etheostoma. gracilior, Congrina. gracilis, Cubiceps. Cymatogaster. Eleginus. Hybopsis. Macrorhamphosus. gracillimus, Gobionellus. graellsi, Lepophidium grahami, Etheostoma.	44 37 11 19 28 19 45 33 22 14 23 36 45 28	halleri, Urolophus hamiltoni, Manta Moxostoma hankinsoni, Artedius Hybognathus Haplodoci Harengula harengus, Clupea harengus harperi, Hybopsis harringtonensis, Allanetta harringtoni, Artedius hastatus, Gobionellus havana, Eucinostomus hayi, Hybognathus	18 39 14 49 10 14 46 39 30 14
Ptilichthys. Sebastodes. gorbuscha, Oncorhynchus. Gordiichthys. gracile, Etheostoma. gracilior, Congrina. gracilis, Cubiceps. Cymatogaster. Eleginus. Hybopsis. Macrorhamphosus. gracillimus, Gobionellus. graellsi, Lepophidium grahami, Etheostoma. grandicomis, Paraclinus.	44 37 11 19 28 19 45 33 22 14 23 36 45 28 43	halleri, Urolophus hamiltoni, Manta Moxostoma hankinsoni, Artedius Hybognathus Haplodoci Harengula harengus, Clupea harengus harperi, Hybopsis harringtonensis, Allanetta harringtoni, Artedius hastatus, Gobionellus havana, Eucinostomus hayi, Hybognathus heidi, Uraspis	18 39 14 49 40 40 39 30 14 30 30
Ptilichthys Sebastodes gorbuscha, Oncorhynchus Gordiichthys gracile, Etheostoma gracilior, Congrina gracilis, Cubiceps Cymatogaster Eleginus Hybopsis Macrorhamphosus gracillimus, Gobionellus graellsi, Lepophidium grahami, Etheostoma grandicomis, Paraclinus grandicornis, Scorpaena	44 37 11 19 28 19 45 33 22 14 23 36 45 28 43 36	halleri, Urolophus hamiltoni, Manta Moxostoma hankinsoni, Artedius Hybognathus Haplodoci Harengula harengus, Clupea harengus harperi, Hybopsis harringtonensis, Allanetta harringtoni, Artedius hastatus, Gobionellus havana, Eucinostomus hayi, Hybognathus heidi, Uraspis Helicolenus	18 39 14 10 14 46 39 30 14 30 30 30
Ptilichthys. Sebastodes. gorbuscha, Oncorhynchus. Gordiichthys. gracile, Etheostoma. gracilior, Congrina. gracilis, Cubiceps. Cymatogaster. Eleginus. Hybopsis. Macrorhamphosus. gracillimus, Gobionellus. graellsi, Lepophidium. grahami, Etheostoma. grandicomis, Paraclinus. grandicornis, Scorpaena. grandis, Fundulus.	44 37 11 19 28 19 45 33 22 14 23 36 45 28 43 36 21	halleri, Urolophus hamiltoni, Manta Moxostoma hankinsoni, Artedius Hybognathus Haplodoci Harengula harengus, Clupea harengus harperi, Hybopsis harringtonensis, Allanetta harringtoni, Artedius hastatus, Gobionellus havana, Eucinostomus hayi, Hybognathus heidi, Uraspis Helicolenus helvomaculatus, Sebastodes	18 39 14 10 10 14 46 30 30 30 30 30 30 30 30
Ptilichthys. Sebastodes. gorbuscha, Oncorhynchus. Gordiichthys. gracile, Etheostoma. gracilior, Congrina. gracilis, Cubiceps. Cymatogaster. Eleginus. Hybopsis. Macrorhamphosus. gracillimus, Gobionellus. graellsi, Lepophidium. grahami, Etheostoma. grandicomis, Paraclinus. grandicornis, Scorpaena. grandis, Fundulus. Ptychocheilus.	44 37 11 19 28 19 45 33 22 14 23 36 45 28 43 36 21 16	halleri, Urolophus hamiltoni, Manta Moxostoma hankinsoni, Artedius Hybognathus Haplodoci Harengula harengus, Clupea harengus harperi, Hybopsis harringtonensis, Allanetta harringtoni, Artedius hastatus, Gobionellus havana, Eucinostomus hayi, Hybognathus heidi, Uraspis Helicolenus helvomaculatus, Sebastodes Hemanthias	18 39 14 49 10 14 40 30 30 30 30 30 30 30 30 30 30 30 30 30
Ptilichthys. Sebastodes. gorbuscha, Oncorhynchus. Gordiichthys. gracile, Etheostoma. gracilior, Congrina. gracilis, Cubiceps. Cymatogaster. Eleginus. Hybopsis. Macrorhamphosus. gracillimus, Gobionellus. graellsi, Lepophidium. grahami, Etheostoma. grandicomis, Paraclinus grandicornis, Scorpaena. grandis, Fundulus. Ptychocheilus. greeleyi, Ichthyomyzon.	44 37 11 19 28 19 45 33 22 14 23 36 45 28 43 36 21 16 6	halleri, Urolophus hamiltoni, Manta Moxostoma hankinsoni, Artedius Hybognathus Haplodoci Harengula harengus, Clupea harengus harperi, Hybopsis harringtonensis, Allanetta harringtoni, Artedius hastatus, Gobionellus havana, Eucinostomus hayi, Hybognathus heidi, Uraspis Helicolenus helvomaculatus, Sebastodes Hemanthias Hemibranchii	18 39 14 49 10 14 46 30 30 30 30 30 30 30 30 30 30 30 30 30
Ptilichthys. Sebastodes. gorbuscha, Oncorhynchus. Gordiichthys. gracile, Etheostoma. gracilior, Congrina. gracilis, Cubiceps. Cymatogaster. Eleginus. Hybopsis. Macrorhamphosus. gracillimus, Gobionellus. graellsi, Lepophidium grahami, Etheostoma. grandicomis, Paraclinus grandicornis, Scorpaena grandis, Fundulus. Ptychocheilus greeleyi, Ichthyomyzon. greenei, Cottus.	44 37 11 19 28 19 45 33 22 14 23 36 45 28 43 36 21 16 6 39	halleri, Urolophus hamiltoni, Manta Moxostoma hankinsoni, Artedius Hybognathus Haplodoci Harengula harengus, Clupea harengus harperi, Hybopsis harringtonensis, Allanetta harringtoni, Artedius hastatus, Gobionellus havana, Eucinostomus hayi, Hybognathus heidi, Uraspis Helicolenus helvomaculatus, Sebastodes Hemanthias Hemibranchii Hemicaranx	18 39 14 49 10 14 46 30 30 31 22 23 30
Ptilichthys. Sebastodes. gorbuscha, Oncorhynchus. Gordiichthys. gracile, Etheostoma. gracilior, Congrina. gracilis, Cubiceps. Cymatogaster. Eleginus. Hybopsis. Macrorhamphosus. gracillimus, Gobionellus. graellsi, Lepophidium grahami, Etheostoma. grandicomis, Paraclinus grandicornis, Scorpaena grandis, Fundulus. Ptychocheilus. greeleyi, Ichthyomyzon. greenci, Cottus. Notropis.	44 37 11 19 28 19 45 33 22 14 23 36 45 28 43 36 21 16 6 39 15	halleri, Urolophus hamiltoni, Manta Moxostoma hankinsoni, Artedius Hybognathus Haplodoci Harengula harengus, Clupea harengus harperi, Hybopsis harringtonensis, Allanetta harringtoni, Artedius hastatus, Gobionellus havana, Eucinostomus hayi, Hybognathus heidi, Uraspis Helicolenus helvomaculatus, Sebastodes Hemanthias Hemibranchii Hemicaranx Hemiemblemaria	18 39 14 49 10 14 46 39 30 30 30 30 45 45
Ptilichthys. Sebastodes. gorbuscha, Oncorhynchus. Gordiichthys. gracile, Etheostoma. gracilior, Congrina. gracilis, Cubiceps. Cymatogaster. Eleginus. Hybopsis. Macrorhamphosus. gracillimus, Gobionellus. graellsi, Lepophidium grahami, Etheostoma. grandicomis, Paraclinus. grandicornis, Scorpaena. grandis, Fundulus. Ptychocheilus. greeleyi, Ichthyomyzon. greenet, Cottus. Notropis. greeni, Polypera.	44 37 11 19 28 19 45 33 22 14 23 36 45 28 43 36 21 16 6 39 15 41	halleri, Urolophus hamiltoni, Manta Moxostoma hankinsoni, Artedius Hybognathus Haplodoci Harengula harengus, Clupea harengus harperi, Hybopsis harringtonensis, Allanetta harringtonensis, Allanetta harringtoni, Artedius hastatus, Gobionellus havana, Eucinostomus hayi, Hybognathus heidi, Uraspis Helicolenus helvomaculatus, Sebastodes Hemanthias Hemibranchii Hemicaranx Hemiemblemaria Hemilepidotus	18 39 14 49 10 14 46 30 30 43 30 43 30 43 30 43 43 43 43 43 43 43 43 43 43 43 43 43
Ptilichthys. Sebastodes. gorbuscha, Oncorhynchus. Gordiichthys. gracile, Etheostoma. gracilior, Congrina. gracilis, Cubiceps. Cymatogaster. Eleginus. Hybopsis. Macrorhamphosus. gracillimus, Gobionellus. graellsi, Lepophidium grahami, Etheostoma. grandicomis, Paraclinus. grandicornis, Scorpaena. grandis, Fundulus. Ptychocheilus greeleyi, Ichthyomyzon. greenet, Cottus. Notropis. greeni, Polypera. greyae, Gillellus.	44 37 11 19 28 19 45 33 22 14 23 36 45 28 43 36 21 16 6 39 15 41 42	halleri, Urolophus hamiltoni, Manta Moxostoma hankinsoni, Artedius Hybognathus Haplodoci Harengula harengus, Clupea harengus harperi, Hybopsis harringtonensis, Allanetta harringtonensis, Allanetta harringtoni, Artedius hastatus, Gobionellus havana, Eucinostomus hayi, Hybognathus heidi, Uraspis Helicolenus helvomaculatus, Sebastodes Hemanthias Hemibranchii Hemicaranx Hemiemblemaria Hemilepidotus hemilepidotus, Hemilepidotus	18 39 14 49 10 14 46 39 30 30 30 43 30 43 30 43 30 43 30 43 43 43 43 43 43 43 43 43 43 43 43 43
Ptilichthys. Sebastodes. gorbuscha, Oncorhynchus. Gordiichthys. gracile, Etheostoma. gracilior, Congrina. gracilis, Cubiceps. Cymatogaster. Eleginus. Hybopsis. Macrorhamphosus. gracillimus, Gobionellus. graellsi, Lepophidium grahami, Etheostoma. grandicomis, Paraclinus grandicornis, Scorpaena. grandis, Fundulus. Ptychocheilus greeleyi, Ichthyomyzon. greenet, Cottus. Notropis greeni, Polypera. greyae, Gillellus. greyi, Istiophorus.	44 37 11 19 28 19 45 33 22 14 23 36 45 28 43 36 21 16 6 39 15 41 42 35	halleri, Urolophus hamiltoni, Manta Moxostoma hankinsoni, Artedius Hybognathus Haplodoci Harengula harengus, Clupea harengus harperi, Hybopsis harringtonensis, Allanetta harringtoni, Artedius hastatus, Gobionellus havana, Eucinostomus hayi, Hybognathus heidi, Uraspis Helicolenus helwomaculatus, Sebastodes Hemanthias Hemibranchii Hemicaranx Hemiemblemaria Hemilepidotus hemilepidotus, Hemilepidotus Hemiramphidae	18 39 14 49 10 14 46 30 30 30 31 43 31 32 32 33 32 33 32 33 34 36 36 36 36 36 36 36 36 36 36 36 36 36
Ptilichthys. Sebastodes. gorbuscha, Oncorhynchus. Gordiichthys. gracile, Etheostoma. gracilior, Congrina. gracilis, Cubiceps. Cymatogaster. Eleginus. Hybopsis. Macrorhamphosus. gracillimus, Gobionellus. graellsi, Lepophidium grahami, Etheostoma. grandicomis, Paraclinus. grandicornis, Scorpaena. grandis, Fundulus. Ptychocheilus greeleyi, Ichthyomyzon. greenet, Cottus. Notropis. greeni, Polypera. greyae, Gillellus.	44 37 11 19 28 19 45 33 22 14 23 36 45 28 43 36 21 16 6 39 15 41 42 35 23 36 41 42 43 45 45 45 45 45 45 45 45 45 45	halleri, Urolophus hamiltoni, Manta Moxostoma hankinsoni, Artedius Hybognathus Haplodoci Harengula harengus, Clupea harengus harperi, Hybopsis harringtonensis, Allanetta harringtonensis, Allanetta harringtoni, Artedius hastatus, Gobionellus havana, Eucinostomus hayi, Hybognathus heidi, Uraspis Helicolenus helvomaculatus, Sebastodes Hemanthias Hemibranchii Hemicaranx Hemiemblemaria Hemilepidotus hemilepidotus, Hemilepidotus	18 39 1-4 10 10 14 46 30 30 30 30 43 30 30 43 30 43 20 30 43 20 43 20 44 30 44 44 45 45 46 46 46 46 46 46 46 46 46 46 46 46 46

Hemitripterus	39	Hoplunnis	19
hemphilli, Stathmonotus	43	horsti, Gobiosoma	36
henlei, Triakis	7	hoyi, Coregonus	11
hentzi, Hypsoblennius	43	hubbsi, Cottus	39
hepsetus, Anchoa	11	Cyprinodon	21
Herichthys—see Cichlasoma		Ichthyomyzon	-6
Hermosilla	32	$Moxostoma \dots \dots \dots \dots$	18
Hesperoleucus		Novumbra	12
Hesperomyrus		hudsonius, Notropis	15
Heterandria		humeralis, Harengula	10
Heteristius		humilis, Lepomis	27
heterochir, Gambusia	$\frac{1}{22}$	Hybognathus	14
heteroclitus, Fundulus		Hybopsis	1.1
heterodon, Notropis	15	Hyborhynchus—see Pimcphales	14
Heterodontidae	6	Hydrolagus	9
Heterodontus	$\frac{6}{6}$	Hypentelium	
heterolepis, Notropis		Hyporoantii	17
Heteromi	$\frac{10}{20}$	Hyperoartii	6
Heterosomata		Hyperotreti	6
		Hyperprosopon	- 33
Heterostichus		Hypleurochilus	43
heterurus, Cypselurus	$\frac{20}{20}$	hypochromus, Allolumpenus	44
Hexagrammidae	38	hypodus, Decapterus	29
Hexagrammos	38	Hypomesus	12
Hexanchidae		Hypoplectrus	25
Hexanchus	6	hypoplectus, Rathbunclla	42
hexapterus, Ammodytes	41	Hypoprion	7
hians, Ablennes		Hyporhamphus	20
hildebrandi, Noturus	19	hypostoma, Mobula	9
$Hiodon \dots \dots \dots \dots$	12	Hypsagonus	40
Hiodontidae		hypselopterus, Notropis	15
Hippocampus	23	hypsilepis, Notropis	15
Hippoglossina	47	hypsinotus, Hybopsis	14
Hippoglossoides	47	Hypsoblennius	43
hippoglossoides, Reinhardtius	47	Hypsopsetta	47
Hippoglossus	47	Hypsurus	33
hippoglossus, Hippoglossus	47	Hypsypops	33
hippos, Caranx		Hysterocarpus	33
hippurus, Coryphaena	30	hystrix, Diodon	49
Hirundichthys	21		-0
hirundo, Leiocottus	40	I	
hispanus, Gonioplectrus		Icelinus	30
hispidus, Monacanthus	49	Icelus	-50 -59
Histrio	50	Ichthyomyzon	00
histrio, Etheostoma	28	Icichthys	45
Histrio			31
Holacanthus	$\frac{32}{32}$	Icosteidae	
holacanthus, Diodon	49		45
holbrooki, Diplodus		Icosteus	45
Ophidion	$\frac{32}{45}$	Ictaluridae	18
Holomotus and Ammhistishus	49	Ictalurus	18
Holonotus—see Amphistichus	49	Icticus	45
holderi, Alloclinus	42	Ictiobus	17
Holocentridae	24	illecebrosus, Notropis	15
Holocentrus	24	Ilypnus	36
holochroma, Cryptopterygium	19	imberbe, Peristedion	38
hopkinsi, Plagiogrammus	44	imperialis, Luvarus	35
Sebastodes	37	impressa, Ariosoma	19
hopliticus, Paricelinus	40	incisor, Kyphosus	32

$inconstans, Eucalia \dots \dots \dots \dots$	23	Sebastodes	37
indica, Makaira	35	Jordania	39
inermis, Anoplagonus	40	juliae, Etheostoma	28
Dermatolepis	25	K	
Scorpacna	37		
infraspinata, Asterotheca	40	kalisherae, Labrisomus	43
ingens, Hippocampus	23	kanawhae, Etheostoma	28
Iniomi		kansae, Fundulus	21
inornata, Raja	8	Kathetostoma	42
inscriptum, Etheostoma	28	Katsuwonus—see Euthynnus	20
inscriptus, Trinectes	47	kendalli, Verma	20
insignis, Catostomus	14		28
Noturus	$\frac{14}{19}$	keta, Oncorhynchus	11
insolatus, Chromis	33	kincaidi, Malacocottus	40
integripinnis, Paraclinus		Raja	11
intermedius, Pantosteus	18	kisutch, Oncorhynchus	
Synodus	13		11
interrupta, Raja	8		
interruptus, Archoplites			41
interstitialis, Mycteroperca	$\frac{27}{25}$	koelzi, Amphistichus	
intertinctus, Mystriophis	$\frac{20}{20}$	Kyphosidae	32
Ioglossus	35	Kyphosus	32
ionthas, Hypsoblennius	43	\mathbf{L}	
ios, Clevelandia		Labidesthes	46
Iotichthys	14	Labridae	
irretitus, Gordiichthys			43
isodon, Aprionodon	7		14
isolepis, Isopsetta	47		17
Isopsetta	47		26
Isospondyli			18
Istiophoridae	35		34
Istiophorus	35	lachrymale, Moxostoma	18
Isurus	7	Lactophrys	49
itajara, Epinephelus		Lactoria	$\frac{10}{49}$
wajara, 25 principilitas		lacustris, Ictalurus—see punctatus, I.	30
J		laeta, Pholis	4 3
jacksoni, Embiotoca	33		49
jacobus, Myripristis	24	laevigatus, Lagocephaluslaevis, Raja	-8
jamaicensis, Urolophus	$\overline{9}$	Ranzania	49
japanica, Mobula	9	Lagocephalus	49
japonica, Lampetra	6	lagocephalus, Lagocephalus	49
japonicus, Arctoscopus			17
Scomber	35	Lagodon	32
jeannae, Bollmannia	35	lahontan, Pantosteus	18
Lepophidium		lamiella, Carcharhinus	7
jemezanus, Notropis	15	Lamna	7
jenkinsi, Fundulus	21	Lamnidae	-6
Jenkinsia	10	lamottei, Lampetra	-6
jessiae, Etheostoma	28	Lampetra	6
jocu, Lutjanus		Lamprididae	23
johannae, Coregonus	11		23
Jordanella	21	Lampris	23
jordani, Eopsetta	47	lamprotaenia, Anchoa	11
Etheostoma	28	Jenkinsia	10
Mycteroperca	25	· · · · · · · · · · · · · · · · · · ·	49
Ronquilus	42		31

lanceolatus, Stellifer	31	Limanda	47
Larimus	31	limbatus, Carcharhinus	7
lateralis, Artedius	39	limi, Umbra	12
Embiotoca	33	lindneri, Lonchopisthus	41
lathami, Trachurus	30	lineata, Parahollardia	48
latifrons, Xeneretmus	40	lineatus, Achirus	47
latipinna, Mollienesia	22	Euthynnus	34
tatipinnis, Catostomus	17	Genyonemus	31
Zaniolepis	38	Oostethus	23
latos, Empetrichthys	21	Phtheirichthys	48
latus, Caranx	29	lineopunctatus, Xanthichthys	49
laurae, Parexoglossum	16	liolepis, Xystreurys	47
lavalaei, Lycodes		Liopsetta	47
Lavinia		$liorus, Chasmistes \dots \dots \dots \dots$	17
leedsi, Notropis	15	Liparis	41
lefroyi, Eucinostomus	30	liparis, Liparis	41
	30	lirus, Notropis	15
leiopomus, Cottus	39	littoralis, Menticirrhus	31
leiops, Xeneretmus		liza, Mugil	46
Leiostomus	31	Lobotes	26
lentiginosa, Raja	8	Lobotidae	26
lentiginosus, Rhinobatos	8	lockingtoni, Icichthys	45
Lepibema—see Roccus		Lonchopisthus	41
Lepidocybium	34	lonchurus, Opisthognathus	
Lepidogobius	36	$longicaudus, Gobionellus \dots \dots \dots$	36
Lepidomeda	14	longimanum, Etheostoma	
Lepidopsetta		longimanus, Carcharhinus	7
Lepidopus	34	longipala, Gobiosoma	36
lepidum, Etheostoma	28		41
	36	Microdesmus.	
Notropis	15	Taractes	
Lepisosteidae	10		44
Lepisosteus	10	Notropis'	
	27	longispinis, Pontinus	36
Lepophidium	45	longum, $Gobiosoma$	36
leptacanthus, Noturus		longurio, Scoliodon	
	14	Lophiidae	49
	40	Lophiiformes	49
Leptolucania	22		49
	40	Lophobranchii	
$lepturus, \ Trichiurus$	34	Lophogobius	36
leptus, Hemanthias	25	Lopholatilus	29
Letharchus	19	Lophopsetta—see Scophthalmus	
	36	Lophotidae	24
	47	Lophotus	24
leucas, Carcharhinus	7	Lota	22
Leucichthys	11	lota, Lota	22
leucichthys, Stenodus	12	louisianae, Syngnathus	23
leuciodus, Notropis	15		24
leucosteus, Calamus	32	Lucania	22
$leucostictus, Eupomacentrus \dots $	33	lucasana, Mobula	9
$Leures thes \dots \dots$	46		$2\overline{1}$
			13
levis, Sebastodes	3 7	lucius, Esox	12
lewini, Sphyrna	7	Ptychocheilus	16
libertate, Opisthonema	10	lugubris, Caranx	
licha. Dalatias	8		46

Lumpenella		Canthidermis	
Lumpenus		Cryptac anthodes	
lumpretaeformis, Lumpenus		Dormitator	35
lumpus, Cyclopterus	41	Lumpenus	
lunatus, Bothus	46	Notorynchus	6
lunulatus, Mustelus		Notropis	15
tupus, Anarhichas	43	Psenes	45
Ictalurus	18	Pseudupeneus	32
lute ovinctum, Etheostoma	28	Scomberomorus	
$lutipinnis$, $\acute{N}otropis$		Sphaeroides	
Lutjanidae		Trinectes	
Lutjanus	26	maculipinna, Halichoeres	
lutrensis, Notropis	15	maculipinnis, Carcharhinus	
Luvaridae		maculosus, Oligocottus	
Luvarus		maeandricus, Gobiesox	
luxatus, Catostomus		mahogoni, Lutjanus	
Lycenchelys		majalis, Fundulus	
Lycichthys—see Anarhichas		Makaira	35
Lycodapus	44	Malacanthus	
Lycodes		Malacocottus	
Lycodopsis		Malacoctenus	
Lyconectes		maliger, Sebastodes	
Lyconema		Mallotus	19
lyolepis, Anchoa		malma, Salrelinus	
Lyopsettalyricus, Evorthodus	47 26	mandibularis, Lycodapus	
Lathraman	26	Manta	
Lythrypnus	90		17
M		marginata, Brosmophycis	45
	41	marginatus, Cottus	
macalpini, Cyclopteropsis	41		
macarellus, Decapterus		Lepomis	21
macdonaldi, Sebastodes		mariae, Etheostoma	
macellus, Triglops			24
Macrhybopsis			
macrocephala, Percina		marinus, Bagre	18
macrocephalus, Gadus		Petromyzon	6
macrocheilus, Catostomus		Sebastes	
macrochirus, Lepomis		marmorata, Gymnura	9
macrodon, Garmannia		marmoratus, Paraclinus	43
macrognathus, Opisthognathus	41	Rivulus	
macrolepidotum, Moxostoma	18	I	
macrolepidotus, Pogonichthys	16		
Macropinna			46
macrops, Citharichthys		martinicensis, Ocyanthias	25
macropterus, Centrarchus	27	Xyrichthys martinicus, Mulloidichthys	34
	43	martinicus, Mulloidichthys	31
Macrorhamphosus		martis, Prionotus	
macrostomum, Haemulon		masquinongy, Esox	12
Macrouridae	22		15
Macrozoarces	44	maxillingua, Exoglossum	13
macrurus, Hoplunnis	19	maxillosus, Opisthognathus	41
macularius, Cyprinodon	21	maximus, Cetorhinus	7
maculata, Percina	29	Lachnolaimus	34
maculatofasciatus, Paralabrax	25		50
maculatum, Etheostoma	28		40
maculatus, Apogon	0.0	3.5.3	14
	26	Meda	

mediocris, Alosa	10	miniatum, Peristedion	38
medirostris, Acipenser	9	miniatus, Sebastodes	37
medius, Lumpenus		minimus, Micrometrus	33
meeki, Hybopsis	14	minor, Anarhichas	43
megalepis, Doratonotus	33	Symphurus	48
Megalops'		Minytrema	
megalotis, Lepomis	27	mirabilis, Gillichthys	36
Melanogrammus	22	Phenacobius	16
melanops, Minytrema		Misgurnus	
Sebastodes	37	mississippiensis, Roccus	26
melanopterus, Eucinostomus		mitchilli, Anchoa	
melanostictus, Psettichthys		miurus, Noturus	
melanostomus, Sebastodes		Moapa	14
melanurum, $Haemulon$		Mobula	
melanus, Centropristes		Mobulidae	9
melas, Ictalurus		mohavensis, Siphateles	
Melichthys		mokarran, Sphyrna	
Membras		Mola	.10
Menidia		mola, Mola	
menidia, Menidia		Molidae	
Menticirrhus		Mollienesia	99
Merluccius			
		Monacanthus	
merriami, Empetrichthys	21	monacha, Hybopsis	
Mesogonistius—see Enneacanthus	49	monoceros, Alutera	
metzi, Gibbonsia		Monolene	47
mexicana, Pikea		monopterygius, Aspidophoroides	40
mexicanus, Astyanax		Pleurogrammus	38 49
miarcha, Anchoviella	11	montereyensis, Gibbonsia	
microcephalus, Somniosus	8	monticola, Agonostomus	
Microcyprini	21	mordax, Engraulis	11
Microdesmidae		Gymnothorax	
Microdesmus		Mystriophis	20
microdon, Pseudotriakis	7	Osmerus	
Microgadus	22	morhua, Gadus	22
Micrognathus		moringa, Gymnothorax	19
Microgobius		morio, Epinephelus	25
microlepidotus, Orthodon		Morone—see $Roccus$	
microlepis, Microgobius		Moxostoma	17
Mycteroperca	25	mucosus, $Liparis$	41
Scorpaena	37	Xiphister	44
$microlophus, Lepomis \dots \dots \dots$	27	mucronatus, Neoconger	
Micrometrus	33	Mugil	46
microperca, Etheostoma	28	Mugilidae	
Micropogon	31	Mullidae	
micropogon, Hybopsis		Mulloidichthys	
microps, Catostomus	17	Mullus	31
Micropterus	27	multilineata, Chromis	33
micropterus, Oxyporhamphus	21	multiocellatus, Antennarius	50
Microspathodon	33	Muraena	19
microstoma, Macropinna	12	muraena, $Callechelys$	19
Microstomus	47		19
microstomus, Etropus	46	muscarum, Rimicola	48
micrura, Gymnura	9	Mustelus	7
micrurum, Syacium		Mycteroperca	
milberti, Carcharhinus	7	Myctophidae	
miliaris, Muraena		Myctophiformes	
militarie Rollator	38	muorei Gabulus	36

Myliobatidae	9	Nicholsina	
Myliobatis		niger, Centrolophus	
Mylocheilus		Esox	
Mylopharodon		$Ictiobus \dots \dots \dots \dots \dots \dots$	
myops, Trachinocephalus		nigrescens, Gila	
Myoxocephalus		nigriargenteus, Cubiceps	45
myriaster, Porichthys		nigricans, Enchelycore	19
Myrichthys	19	Girella	32
Myripristis	24	Hypentelium	17
Myrophis		Makaira	38
mystacinus, Epinephelus		nigricinetus, Labrisomus	4:
Opisthognathus		nigripinnis, Bathyagonus	40
mysticetus, Cetengraulis	11	Coregonus	13
mystinus, Sebastodes	37	Paraclinus	4:
Mystriophis		nigritus, Epinephelus	
Myxine	6	nigrocinctus, Sebastodes	3
Myxinidae	6	nigrofasciata, Percina	
Myxiniformes	$\ddot{6}$	nigromaculatus, Pomoxis	$\tilde{2}$
Myxinoidea	$\overset{\mathtt{o}}{6}$	nigromarginatus, Gymnothorax	10
Myximoldea	U	nigrum, Etheostoma	28
TAT.		nipigon, Coregonus	
${f N}$		nitens, Trichiurus	97
namaycush, Salvelinus	12	niteris, Trichitarias	- 05 - 01
$Narcine \dots \dots \dots \dots \dots$	8	niveatus, Epinephelus	
narinari, Aetobatus	$\ddot{9}$	niveus, Notropis	
nasus, Coregonus		nobiliana, Torpedo	- 20
Lamna	7	nobilis, Conodon	- პ(
Notae anthus		Cynoscion	ئ د
		Gambusia	
nasuta, Percina		Nocomis	
nasutus, Ogcocephalus		nocturnus, Noturus	19
natalis, Ictalurus		Nomeus	48
Naucrates		normani, Saurida	
naucrates, Echeneis		norrisi, Mustelus	7
Nautichthys		Notacanthidae	
nebulifer, Paralabrax		Notacanthiformes	20
nebulosus, Cynoscion		Note anthus	20
Ictalurus		notata, Strongylura	20
Sebastodes	37	notatus, Fundulus	
Nectoliparis	41	Pimephales	
Negaprion	7	Porichthys	49
Nematistius	30	Notemigonus	
Nemichthyidae		nothus, Cynoscion	
Neoclinus	43	notius, Micropterus	2
Neoconger		notogramma, Percina	20
neogaeus, Chrosomus	13	Notorynchus	
Neomerinthe	36	notospilotus, Artedius	30
Neoscopelarchoides	13	notospilus, Prionodes	9
Neothunnus—see Thunnus			
nephelus, Sphaeroides	49	Notropisnotti, Fundulus	91
nerka, Oncorhynchus			
neucratoides, Echeneis	48	Noturus	
nevadae, Crenichthys		novaculum, Ophidion	
nevadensis, Cyprinodon	$\frac{21}{21}$	Novumbra	
newberryi, Eucyclogobius		nubila, Dionda	
		nuchalis, Hybognathus	
Nezumia		nuchipinnis, Labrisomus	4:
nianguae, Etheostoma		nudus, Gymnachirus	
nicholsi, Blennius	43	nugator, Chirolophus	44
Coryphopterus	35	nybelini, Triglops	4(

0		Oncorhynchus	11
obesus, Enneacanthus	27	onitis, Tautoga	34
Thunnus	35	Oostethus	23
obeyense, Etheostoma	28	opereularis, Polydactylus	46
	17	Ophichthidae	19
Paralichthys	47	Ophichthus	20
obscurus, Carcharhinus	7	Ophididae	45)
obtusirostris, Exocoetus	21	Ophidion	4.)
	23	Ophiolemius	43
	40	Ophicarian	58 91
	17	Ophioscion	-61 -60
	$\frac{22}{}$	ophis, Ophichthusophryas, Prionotus	20
	19	Opisthognathidae	41
	36	Opisthognathus	41
	35	Opisthonema	10
	42	Opisthoproctidae	12
Chaenopsis		Opsanus	40
Raja	8	Opsopocodus	16
	31	orbis, Eumicrotremus	41
	24	orcutti, Gila	14
,	$\frac{43}{50}$	oreas, Chrosomus	$\overline{13}$
	33	Orectolobidae	7
TO	$\frac{35}{46}$	oregonensis, Ptychocheilus	16
	$\frac{10}{32}$	Oregonichthys	14
	$\frac{32}{20}$	orientalis, Anarhichas	43
octodecemspinosus, Myoxocephalus	40	Sarda	35
	38	ornata, Pholis	43
octonemus, Polydactylus	$\frac{36}{46}$	ornatum, Campostoma	13
oculatus, Etelis	$\frac{10}{26}$	ortenburgeri, Notropis	
	- 39	Orthodon	
Lepisosteus		Orthonopias	40
Myrichthys		Orthopristis	31
	40		28
	25	osculus, Rhinichthys	16
Ocyurus		Osmeridae	
ocyurus, Centropristes	25	Osmerus	
Odontaspis—see Carcharias		osseus, Lepisosteus	10
	40	Ostariophysi	
Odontoscion:	31	Osteichthyes	49
ogac, Gadus	22	ostcochir, Remora	48
Ogcocephalidae	50	Ostroniidaa	
Ogcocephalus	50	Ostraciidae	49
Ogilbia	45	Otrunter—see Stenotomus	40
oğlinum, Opisthonema	10	ovalis, Sebastodes	27
ohiensis, Alosa		Oxyjulis	
	27	Oxylebius	38
olidus, Hypomesus			21
	40	oxyrhyncha, Percina	
Oligoplites	90 20		9
olisthostomus, Diapterus	9U 91	Notropis	
olivaceus, runaulus	∠1 10	oxyrinchus, Isurus	7
	19 40	ozarcanus, Notropis	15
olseni, Raja	8	, , , , , , , , , , , , , , , , , , , ,	-
	24	P	
ommata, Leptolucania		pachycephalus, Lagocephalus	40
$omostigmum, Otophidium \dots \qquad $	45	pacifica, Lycodopsis	44
		1. workers and composition of the second sec	

pacificus, Microstomus	47	pelagicus, Nectoliparis	41
Somniosus	8	Syngnathus	
Thaleichthys		pelamis, Euthynnus	
Pagrus		pelicanus, Symphurus	
paitensis, Trachinotus	30	pellucida, Ammocrypta	
palearis, Lycodes	44	pellucidus, Icticus	45
Palinurichthys		peltata, Percina	29
pallasi, Clupea harengus		Pempheridae	
Pallasina		Pempheris	
pallidus, Lycodes		penna, Calamus	
palmaris, Percina	29	pensacolae, Harengula	10
Palometa	45	pentacanthus, Asterotheca	
pandionis, Emblemaria		Peprilus	45
pantherina, Percina		Perca.	
Pantosteus	18	Percidae	
papillifer, Gobiesox	48	Perciformes	
papillosum, Syacium	47	perciformis, Palinurichthys	
pappillosum, Moxostoma	10	Percina	
Paracentropristes	25	percobromus, Notropis	15
Paraclinus	49 49		
paradoxus, Psychrolutes	40	Percomorphi	
Parahollardia		Percophididae	
Paralabrax		Percopsidae	24
		Percopsiformes	
paralatus, Prionotus		Percopsis	
Paralichthys		perfasciata, Anchoviella	
Paraliparis		Peristedion	
parallelus, Centropomus	24	perlongum, Etheostoma	
Paranthias	$Z_{\mathfrak{I}}$	perotteti, Pristis	
Parathunnus—see Thunnus	40	perpallidus, Notropis	
pardus, Opsanus		perplexus, Cottus	
Parexocoetus		perryae, Callechelys	
Parexoglossum		personata, Eviota	
Paricelinus	_	peruanus, Hemanthias	
Parmaturus		petenense, Dorosoma	
parmifera, Raja		petersoni, Notropis	
Parophrys		Petrometopon	
parrai, Clepticus	33	Petromyzon	
Haemulon		Petromyzontia	6
partitus, Eupomacentrus		Petromyzontidae	
paru, Peprilus		Petromyzontiformes	6
parva, Lucania	22	Phanerodon	
parvipinne, Etheostoma	28	Phenacobius	
parvipinnis, Cynoscion		phenax, Mycteroperca	25
Fundulus		philadelphicus, Centropristes	25
parvus, Ogcocephalus		phlegethontis, Iotichthys	14
Symphurus	48	phoebe, Prionodes	25
Upeneus	32	Pholidae	
patronus, Brevoortia		Pholis	
pattersoni, Trogloglanis	19	photogenis, Notropis	16
paucispinis, Sebastodes		phoxocephala, Percina	29
pectinatus, Centropomus	25	Phtheirichthys	48
Pristis	8	Phycis	22
pectoralis, Dallia	12	Phytichthys	44
Enneapterygius	42	picta, Eleotris	35
Nematistius	30	pictus, Oxylebius	38
Prionotus		picudilla, Sphyraena	46
Pediculati	49	pidschian, Coregonus	11

piger, Symphurus	48	polylepis, Balistes	48
pigmentarius, Apogon		Polymixia	24
Pikea		Polymixiidae	24
pilicornis, Blennius		Polynemidae	46
Pimelometopon		Polyodon	9
Pimephales	16	Polyodontidae	9
pingeli, Triglops	40	Polypera	41
pinniger, Sebastodes	37	Polyprion	25
piratula, Emblemaria	42	polyspinis, Sebastodes	
pisonis, Eleotris	35	polystictus, Trachipterus	24
Placopharynx—see Moxostoma		Pomacanthus	
Plagiogrammus	44	Pomacentridae	
plagiusa, Symphurus	48	Pomadasyidae	
Plagopterus	16	Pomadasys	
planeri, Lampetra	6	Pomatomidae	
planifrons, Apogon	26	Pomatomus	29
Eupomacentrus		Pomolobus—see $Alosa$	
platessoides, Hippoglossoides	47	pomospilus, Paracentropristes	25
Platichthys	47	pomotis, Acantharchus	27
platorynchus, Scaphirhynchus	9	Pomoxis	27
platostomus, Lepisosteus	10	Pontinus	36
platycephalus, İctalurus	18	Porichthys	49
Platygobio	14		44
platyrhincus, Lepisosteus	10	Poronotus	45
Platyrhinoidis	8		49
platyrhynchus, Pantosteus		porosus, Carcharhinus	7
plebeius, Pantosteus	18	potteri, Notropis	
Plectobranchus		praecisus, Eumesogrammus	
Plectognathi		pretiosus, Hypomesus	
Plectrypops	24	Ruvettus	
Pleurogrammus		Priacanthidae	
Pleuronectes			$\overline{26}$
Pleuronectidae			18
Pleuronectiformes		princeps, Caulolatilus	
Pleuronichthys	47		$\overline{39}$
plumbea, Hybopsis	14	Prionace	7
plumieri, Diapterus		Prionodes	
$Haemulon \dots Haemulon \dots$	31		38
Malacanthus		Pristidae	8
Scorpaena		Pristigenys	
Pneumatophorus—see Scomber	01	Pristipomoides	$\frac{26}{26}$
podostemone, Etheostoma	28	Pristis	
Poecilichthys—see Etheostoma	_0	probatocephalus, Archosargus	
Poeciliidae	22	proboscidea, Limanda	
	22	procne, Notropis	16
Pocciliopsispoecilurum, Moxostoma	18	productus, Merluccius	22
		Rhinobatos	8
poeyi, Halichoeres			28
SynodusPogonias		Prognathodes	
	$\frac{31}{16}$		$\frac{32}{21}$
Pogonichthys			
Polistotrema	6 21	I	16
politus, Seriphus	31	Promicrops—see Epinephelus	95
Pollachius	$\frac{22}{26}$	Pronotogrammus	25
pollux, Neomerinthe		<i>I</i>	32
polyacanthocephalus, Myoxocephalus	40	proriger, Sebastodes	36
polyactocephalus, Chirolophus	44	proserpinus, Notropis	
Poludactulus	46	Prosonium	11

Protospondyli		R	
proximus, Microgadus		Rachycentridae	20
Psenes	45	Rachycentron	
Psettichthys	47	radians, Sparisoma	2 <i>0</i> 2 <i>1</i>
Pseudogrammus	25	radiata, Raja	
pseudogula, Eucinostomus		radiatus, Halichoeres	21 21
pseudoharengus, Alosa		Ogcocephalus	とし
pseudomaculatus, Apogon		radiosum, Etheostoma	ยบ กอ
Pseudopleuronectes		radiosus, Antennarius	
Pseudoscarus—see Scarus		Cuminodon	ยบ 91
Pseudotriakis	7	Cyprinodon	41 10
Pseudupeneus		radula, Melichthys	10 10
psittacus, Xyrichthys			
Psychrolutes		Raja	
Ptilichthyidae	44	Rajidae	8
Ptilichthys			8
Ptychocheilus		randalli, Acanthurus 3	
puellaris, Decodon	33	Ranzania	
pugetensis, Chitonotus	39	raphidoma, Strongylura	
pulchellus, Bodianus	33	rastrelliger, Sebastodes	
Liparis		Rathbunella	
pulcher, Equetus		rathbuni, Fundulus	
pulchrum, Pimelometopon		Pontinus	
pullus, Cantherines		$rayi, Brama \dots $	30
		recalvus, Clinocottus 3	39
pulvereus, Fundulus	26	Regalecidae 2	24
pumilio, Serraniculus	20	Regalecus	24
punctatus, Decapterus	29	$regalis, Cynoscion \dots $	
Equetus		Scomberomorus	35
Ictalurus		regius, Lampris	23
Lepomis		Urophycis	22
Myrophis		regulus, Psenes	45
Stichaeus	44	reighardi, Coregonus	11
punctifer, Mystriophis	20	Reinhardtius	
punctipinnis, Chromis		Remora	48
Dermatostethus		remora, Remora	48
punctulatum, Etheostoma		Remorina	
punctulatus, Gobiesox		remotus, Carcharhinus	
Micropterus		reticulatus, Lycodes	
Pungitius	23	retifer, Scyliorhinus	7
pungitius, Pungitius	23	retifera, Muraena	$\dot{19}$
purpurea, Gila		retrospinis, Plectrypops	24
purpurescens, Anoplarchus		rex, Percina	$2\overline{9}$
pusillus, Symphurus		Rhacochilus	
putnami, Liopsetta	47	Rhamphocottus	
pygmaea, Umbra	12	rhessodon, Gobiesox	
Pylodictis		rhina, Raja	8
pyrrhomelas, Notropis	16	Rhincodon	7
		Rhincodontidae	7
Q			16
quadracus, Apeltes	23	Rhinobatidae	$\overset{1}{8}$
quadricornis, Hypsagonus		Rhinobatios	8
Lactophrys	49	Rhinoptera	9
Myoxocephalus			16
quadriseriatus, Icelinus			37
			э <i>т</i> 30
quadrisquamatus, Apogon			эо 39
quadrituberculatus, Pleuronectes quadrocellata, Ancylopsetta	$\frac{47}{46}$	rhodoterus, Amphistichus	
Quietula			32
Queenuu	36	THOMOOTHUITS, ATCHOSUTYUS	2د

rhomboides, Lagodon	32	Holocentrus	24
Rhomboplites		rupestre, Etheostoma	
rhotheus, Cottus		rupestris, Ambloplites	
rhothoccum, Moxostoma		rupiscartes, Moxostoma	
Rhynchocymba		Ruscarius	40
ricei, Cottus		rutteri, Liparis	41
richardsoni, Alepisaurus	13	Ruvettus	34
Rhamphocottus		Rypticus	
Richardsonius	17		
rimensis, Oligocottus		\mathbf{S}	
Rimicola		sabina, Dasyatis	C
rimiculus, Catostomus		sabinae, Notropis	10
rimosus, Etropus		saburrae, Chasmodes	49
ringens, Xanthichthys		sadina, Etrumeus	
Risor		sagax, Sardinops	10
Rissola	45	sagitta, Etheostoma	-90
ritteri, Pleuronichthys		Lumpenus	4.0
Xeneretmus		saida, Boreogadus	99
Rivulus		saira, Cololabis	
roanokense, Hypentelium		salar, Salmo	40
robusta, Gila	14	salinus, Cyprinodon	91
robustum, Gobiosoma	36	Salmo	11
Moxostoma	18	salmoides, Micropterus	97
robustus, Hippoglossoides		Salmonidae	11
Roccus		Salmonidae	94
Roncador		saltator, Hemiramphus	$\frac{29}{20}$
roncador, Umbrina		saltatrix, Pomatomus	20
rondeleti, Prognichthys	21	saludae, Etheostoma	20 90
Ronquilus	42	Salvelinus	40 19
rosaceus, Sebastodes	37	sanctaerosae, Ulvicola	12
Zalembius		santaanae, Pantosteus	10
rosae, Amblyopsis		sapidissima, Alosa	10
Hyporhamphus		saponaccus, Rypticus	26
roseipinnis, Notropis	16	Sarda	
roseus, Cryptotomus	34	sarda, Sarda	- 90 - 95
Prionotus	38	Sardinella	- 30 - 10
rosispinis, Raja	8	sardinella, Coregonus	11
rostrata, $Anguilla$	19	Sardinops	11
Canthigaster	49	Sarritor	40
rostratus, Heterostichus	42	Satan	
rothrocki, Poroclinus	44	saturnum, Cheilotrema	91
rubellio, Oligocottus	40	Saurida	
rubellus, Notropis	16	saurus, Elops	
ruber, Caranx	29	Oligoplites	
Risor	36	Scomberesox	
ruberrimus, Sebastodes	37	saxatilis, Abudefduf	
rubicunda, Hypsypops		Menticirrhus	-00 -91
rubio, Prionotus	38	Roccus	$\frac{31}{26}$
rubreques, Moxostoma—see valenciennesi,	00	saxicola, Sebastodes	
M.		sayanus, Aphredoderus	97 94
rubricroceus, Notropis	16	sayi, Dasyatissayi	$\frac{24}{9}$
rubrifrons, Hybopsis	14	scaber, Antennarius	_
rubripinne, Sparisoma	34	scabrata, Raja—see radiata, R.	50
rubrivinctus, Sebastodes		scabricens Notronia	10
rubrocinctus, Heteristius	42	scabriceps, Notropis	16
rubrofluviatilis, Cyprinodon		Scaphirhynchus	9
rufilineatum, Etheostoma	28		17
rufus, Bodianus	22		
ragno, Dounanas	oo	Scarus	34

scepticus, Notropis	16	senta, Raja	
Schilbeodes—see $Noturus$		sentus, Engyophrys	46
schoepfi, Alutera	48	sericeus, Rhodeus	16
	49	Seriola	
schomburgki, Pempheris	32	Seriphus	
schultzi, Pholis	43	serpens, Gempylus	34
sciadicus, Fundulus	21	Serranellus	
Sciaenidae	31	Serraniculus	
Sciaenops	31	Serranidae	25
sciera, Percina	29	serranoides, Sebastodes	
scitulus, Prionotus	38	Serranus	
sciurus, Haemulon	31	serriceps, Sebastodes	
$Scoliodon \dots \dots \dots \dots \dots \dots \dots \dots \dots$	7	serriferum, Etheostoma	28
scolopax, Macrorhamphosus	2 3	serrula, Pristigenys	26
$Scomber \dots \dots \dots \dots \dots$	35	sessilicauda, Monolene	
Scomberesocidae	20	setapinnis, Vomer	30
$Scomberesox \dots \dots \dots \dots \dots$	20	setifer, Monacanthus	49
Scomberomorus	35	setiger, Dasycottus	39
Scombridae		shufeldti, Gobionellus	
scombrus, Scomber	35	shumardi, Percina	29
Scopelarchidae	1 3	sialis, Argentina	12
Scophthalmus	47	Vacuoqua	31
Scorpaena	36	sicculus, Labidesthes	46
Scorpaenichthys	40	sigalutes, Gilbertidia	39
Scorpaenidae		signatus, Bathymaster	
Scorpaenodes	37	Hypoprion	10
Scorpidae	32	signipinnis, Notropis	10
scorpioides, Myoxocephalus	40	silenus, Zaprora	40
scorpius, Myoxocephalus		silus, Argentina	01
scovelli, Syngnathus		similis, Fundulus	21
$scrippsae, Otophidium \dots \dots \dots$	45	simillima, Palometa	4:0
scripta, Alutera	48	simoterum, Etheostoma	40
scuticaris, Bascanichthys		simulus, Hemiemblemaria	16
Scyliorhinidae		simus, Notropis	17
Scyliorhinus	7	Siphateles	25
Scytalina	44	Gobionellus	36
Scytalinidae	44 27	smithi, Brevoortia	10
Sebastes	97	snyderi, Catostomus	17
Sebastodes	36	Oligocottus	40
Sebastolobus	29 29	Snyderichthys	17
secundodorsalis, $Thunnus$ —see $thynnus$,	02	solanderi, Acanthocybium	34
T		Soleidae	47
sedecim, Pagrus	32	Solenichthyes	23
sedentarius, Chaetodon	32	Somniosus	-8
Selachii	$\overline{6}$	soporator, Bathygobius	35
Selar	30	sordidus, Citharichthys	46
Selene	30	Sparidae	32
selenops, Ophidion	45	Sparisoma	
sellare, Etheostoma	$\overline{28}$	spathula, Polyodon	6
semicinctus, Halichoeres	$\overline{34}$	spatula, Icelus	36
Sebastodes	38	Lepisosteus	10
semifasciata, Triakis		spectabile, Etheostoma	28
seminolis, Fundulus		spectrunculus, Notropis	16
Semionotiformes		spelaea, Amblyopsis	22
Semotilus	17	spengleri, Sphaeroides	49
senilis, Gambusia	22	Sphaeroides	49

Sphyraena		storeriana, Hybopsis	14
Sphyraenidae		stouti, Polistotrema	- 6
Sphyrna	7	stramineus, Notropis	16
Sphyrnidae	7	striatus, Centropristes	25
spilonotus, Prosopium		$Chaetodon \dots \dots \dots \dots$	32
spilopterus, Citharichthys	46	Epinephelus	25
Notropis	16	Stromateidae	45
spinicauda, Raja	9	Strongylura	20
$spinosa, A canthemble maria \dots 4$	42	strumosus, Gobiesox	48
spinosus, Eumicrotremus	41	Stylephoridae	24
Hemilepidotus	39	Stylephorus	24
Spirinchus	12	subbifrenatus, Rypticus	26
spongicola, Evermannichthys	36	subbifurcata, Ulvaria	44
springeri, Gordiichthys 1	19	subligarius, Serranellus	26
Syngnathus 2	23	subterraneus, Typhlichthys	22
	8	sucetta, Erimyzon	17
Squaliformes	6	suckleyi, Squalus—see acanthias, S.	
	8		48
	29		6
	28	Hexagrammos	
	47	surinamensis, Anisotremus	30
	8		26
		swaini, Etheostoma	28
stabuliforis, $Raja$ —see $laevis$, R .		swani, Bothragonus	40
	4 3	swannanoa, $Etheostoma$	28
starksi, Spirinchus 1		Syacium	47
Stathmonotus 4		symmetricus, Hesperoleucus	14
stearnsi, Prionotus		Lepomis	$\hat{27}$
Roncador	31	Trachurus	30
$Stelgis \dots 4$		Symphurus	48
	26	synagris, Lutjanus	26
TO 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		syncheilus, Catostomus—see columbianus,	-0
stelleri, Hexagrammos	38	C.	
Stellerina		Synchirus	40
Stellifer		Synentognathi	
stellifer, Fundulus	21	Syngnathidae	23
	9	Syngnathus	23
Stenodus	2	Synodontidae	13
stenolepis, Hippoglossus	7	Synodus	13
Stenotomus	2	synodus, Synodus	13
Stephanolepis—see Monacanthus			10
$stephanophrys, Prionotus \dots 33$	8	T	
stephensae, $Neoclinus$	3	$tabacaria, Fistularia \dots \dots \dots$	23
Stereolepis		Taeniotoca—see $Embiotoca$	
sterletus, Agonopsis 40		tahoensis, Catostomus	17
Stichaeidae 4		$tajasica, Awaous \dots \dots$	
Stichaeus	4	Taractes	30
stigmaeum, Etheostoma		Tarpon—see $Megalops$	
stigmaeus, $Citharichthys$			49
stigmaticus, Gobionellus	6 t	taurina, Enophrys	
$stigmaturus, Gobionellus \dots 36$		taurus, Abudefduf	
stilbius, Leuroglossus		Carcharias	6
Notropis 10		Tautoga ;	-
$stipes, Atherinomorus \dots 40$	6	$Tautogolabrus \dots	$3\overline{4}$
Stizostedion		_ v	20
	9 - t	taylori, A semichthys	39 -
$stomata, Hippoglossina \dots 47$	$\frac{9}{7}$	taylori, Asemichthys	ა9 45
tomata, Hippoglossina	7	taylori, Asemichthys	45

tenuis, Cottus		Trachurus	
Erimyzon	17	trachypomus, Ostichthys	
Icelinus	39	trachypterus, Trachipterus	
Leuresthes	46	transmontana, Percopsis	24
Urophycis	22	transmontanus, Acipenser	
teres, Bascanichthys	19	traski, Hysterocarpus	
teretulus, Phenacobius	16	treculi, Micropterus	27
tergisus, Hiodon	12	Triacanthodidae	
terraenovae, Eumicrotremus	41	triacanthus, Poronotus	
$Scoliodon \dots	7	Xeneretmus	41
testudineus, Sphaeroides	49	triacis, Orthonopias	40
Tetragonuridae	45	Triakis	7
Tetragonurus	45	triangulatus, Malacoctenus	43
Tetranarce—see Torpedo		tribulus, Prionotus	38
Tetraodontidae	49	Trichiuridae	
Tetraodontiformes		Trichiurus	34
Tetrapturus	35	$Trichodon \dots \dots \dots \dots \dots$	
tetrazonum, Etheostoma	28	trichodon, Mugil	
texana, Raja	9	$Trichodon \dots \dots \dots$	
texanus, $Notropis$	16	Trichodontidae	41
$Xyrauchen \dots \dots \dots \dots$	18	Trichopsetta	
textilis, Entomacrodus		trichroistius, Notropis	
thalassinum, Etheostoma	28	tricolor, Holacanthus	32
thalassinus, Microgobius	36	tricuspis, Gymnocanthus	
Thalassoma		tridentata, Lampetra	
Thaleichthys	12	tridigitatus, Dactyloscopus	42
thaleichthys, Spirinchus	12	Triglidae	38
thazard, Auxis	34	Triglops	
Theragra	22	trigonus, Lactophrys	10
thompsoni, Gnatholepis	36	Trinectes	17
Ophioscion	31	triporiceps, Conger	
Thoracostei	93	triqueter, Lactophrys	.10
		triserialis, Ophichthus	20
thrissina, Harengula	25	triseriata, Platyrhinoidis	
Thunnus	19		
Thymallus	25	trispinosa, Odontopyxis Trogloglanis	10
thynnus, Thunnus	33 17	1 Toglogiants	19
Tiaroga	8	trutta, Salmo	11
tiburo, Sphyrna		tshawytscha, Oncorhynchus	11
tigrinus, Myrichthys	20	tuckeri, Monacanthus	49
tigris, Mycteroperca	23	tunicatus, Liparis	41
Isurus—see oxyrinchus, I.	20	turneri, Lycodes	90
timucu, Strongylura	20	tuscumbia, Etheostoma	20
Tinca	17	Typhlichthys	20
tinca, Tinca	17	Typhlogobius	3 0
tippecanoe, Etheostoma		typus, Rhincodon	7
tomcod, Microgadus		tyrannus, Brevoortia	10
topeka, Notropis		U	
Torpedinidae	8		1.4
Torpedo	8		44
tortugarum, Serranus		O to tool will in the transfer of the tool will be to t	43
townsendi, Apogon	26	Umbra	
toxotes, Rhacochilus		umbratilis, Notropis	
<i>Trachinocephalus</i>			12
Trachinotus		C MCOLUMN TO THE TOTAL THE TOTAL TO THE TOTAL THE TOTAL TO THE TOTAL THE TOTAL TO T	31
Trachipteridae	24		38
Trachipterus			16
trachura, Raja	9	uncinatus, Artediellus	38
Trachurops—see Selar		$undecimalis,\ Centropomus\ldots\ldots$	25

undulatus, Menticirrhus	<i>Gymnelis</i> 44
Micropogon	vitreum, Etheostoma
unicolor, Hypoplectrus	Stizostedion vitreum
unicuspis, Ichthyomyzon	vittata, Lepidomeda
unifasciatus, Hyporhamphus 20	vittatus, Micrognathus
uninotatus, Neoclinus 43	vivanus, Hemanthias
Upeneus	<i>Lutjanus</i>
uranidea, Percina	vivax, $Ammocrypta$
uranops, Phenacobius 16	volador, Istiophorus—see albicans, I.
Uranoscopidae	volitans, Dactylopterus
uranoscopus, Notropis	Exocoetus
Uraspis	volucellus, Notropis
Urolophus 9	Vomer
Urophycis	<i>vomer</i> , Selene
urospilus, Symphurus	vulpes, $Albula$
usta, Nicholsina	vulpinus, Alopias 6
$uter, Cephalos cyllium \dots 7$	vulsa, Stelgis
▼ 7	
V	\mathbf{W}
$vacca, Rhacochilus \dots 33$	waccamensis, Fundulus
<i>Vacuoqua</i>	warnerensis, Catostomus 17
valenciennesi, Moxostoma	welaka, Notropis
variabilis, Eupomacentrus	$welshi, Ophidion \dots 45$
variatum, Etheostoma	wheatlandi, Gasterosteus 23
$variegatus, Cyprinodon \dots 21$	whipplei, Etheostoma
velifer, Carpiodes	<i>Notropis</i>
<i>Letharchus</i>	whitehursti, Opisthognathus
velox, Euleptorhamphus	williamsoni, Prosopium
venenosa, Mycteroperca	wilsoni, Sebastodes
ventralis, Alutera	
<i>Trichopsetta</i> 47	\mathbf{X}
<i>Xyrichthys</i>	xaenocephalus Notronis 16
ventricosus, Aptocyclus 41	xaenocephalus, Notropis
ventricosus, Aptocyclus	xaenurus, Notropis
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	xaenurus, Notropis
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	xaenurus, Notropis16xaniurus, Parmaturus7Xanthichthys49
ventricosus, Aptocyclus 41 venustus, Notropis 16 Verma 20 vermiculatus, Esox americanus 12 verrilli, Lycenchelys 44	xaenurus, Notropis16xaniurus, Parmaturus7Xanthichthys49xanthostigma, Citharichthys46
ventricosus, Aptocyclus 41 venustus, Notropis 16 Verma 20 vermiculatus, Esox americanus 12 verrilli, Lycenchelys 44 verrucosa, Occa 40	xaenurus, Notropis16xaniurus, Parmaturus7Xanthichthys49xanthostigma, Citharichthys46xanthulus, Cynoscion31
ventricosus, Aptocyclus 41 venustus, Notropis 16 Verma 20 vermiculatus, Esox americanus 12 verrilli, Lycenchelys 44 verrucosa, Occa 40 verticalis, Pleuronichthys 47	xaenurus, Notropis16xaniurus, Parmaturus7Xanthichthys49xanthostigma, Citharichthys46xanthulus, Cynoscion31xanthurus, Leiostomus31
ventricosus, Aptocyclus 41 venustus, Notropis 16 Verma 20 vermiculatus, Esox americanus 12 verrilli, Lycenchelys 44 verrucosa, Occa 40 verticalis, Pleuronichthys 47 vespertilio, Ogcocephalus 50	xaenurus, Notropis16xaniurus, Parmaturus7Xanthichthys49xanthostigma, Citharichthys46xanthulus, Cynoscion31xanthurus, Leiostomus31xantusi, Lepidopus34
ventricosus, Aptocyclus 41 venustus, Notropis 16 Verma 20 vermiculatus, Esox americanus 12 verrilli, Lycenchelys 44 verrucosa, Occa 40 verticalis, Pleuronichthys 47 vespertilio, Ogcocephalus 50 vetula, Balistes 48	xaenurus, Notropis16xaniurus, Parmaturus7Xanthichthys49xanthostigma, Citharichthys46xanthulus, Cynoscion31xanthurus, Leiostomus31xantusi, Lepidopus34xenarcha, Mycteroperca25
ventricosus, Aptocyclus 41 venustus, Notropis 16 Verma 20 vermiculatus, Esox americanus 12 verrilli, Lycenchelys 44 verrucosa, Occa 40 verticalis, Pleuronichthys 47 vespertilio, Ogcocephalus 50 vetula, Balistes 48 Scarus 34	xaenurus, Notropis 16 xaniurus, Parmaturus 7 Xanthichthys 49 xanthostigma, Citharichthys 46 xanthulus, Cynoscion 31 xanthurus, Leiostomus 31 xantusi, Lepidopus 34 xenarcha, Mycteroperca 25 Xeneretmus 40
ventricosus, Aptocyclus 41 venustus, Notropis 16 Verma 20 vermiculatus, Esox americanus 12 verrilli, Lycenchelys 44 verrucosa, Occa 40 verticalis, Pleuronichthys 47 vespertilio, Ogcocephalus 50 vetula, Balistes 48 Scarus 34 vetulus, Parophrys 47	xaenurus, Notropis 16 xaniurus, Parmaturus 7 Xanthichthys 49 xanthostigma, Citharichthys 46 xanthulus, Cynoscion 31 xanthurus, Leiostomus 31 xantusi, Lepidopus 34 xenarcha, Mycteroperca 25 Xenerctmus 40 xenica, Adinia 21
ventricosus, Aptocyclus 41 venustus, Notropis 16 Verma 20 vermiculatus, Esox americanus 12 verrilli, Lycenchelys 44 vertucosa, Occa 40 verticalis, Pleuronichthys 47 vespertilio, Ogcocephalus 50 vetula, Balistes 48 Scarus 34 vetulus, Parophrys 47 vexillaris, Sebastodes 38	xaenurus, Notropis 16 xaniurus, Parmaturus 7 Xanthichthys 49 xanthostigma, Citharichthys 46 xanthulus, Cynoscion 31 xanthurus, Leiostomus 31 xantusi, Lepidopus 34 xenarcha, Mycteroperca 25 Xeneretmus 40 xenica, Adinia 21 Xenistius 31
ventricosus, Aptocyclus 41 venustus, Notropis 16 Verma 20 vermiculatus, Esox americanus 12 verrilli, Lycenchelys 44 verticalis, Pleuronichthys 47 vespertilio, Ogcocephalus 50 vetula, Balistes 48 Scarus 34 vetulus, Parophrys 47 vexillaris, Sebastodes 38 vexillarius, Holocentrus 24	xacnurus, Notropis 16 xaniurus, Parmaturus 7 Xanthichthys 49 xanthostigma, Citharichthys 46 xanthulus, Cynoscion 31 xanthurus, Leiostomus 31 xantusi, Lepidopus 34 xenarcha, Mycteroperca 25 Xenerctmus 40 xenica, Adinia 21 Xenistius 31 Xenopterygii 48
ventricosus, Aptocyclus 41 venustus, Notropis 16 Verma 20 vermiculatus, Esox americanus 12 verrilli, Lycenchelys 44 verticalis, Pleuronichthys 47 vespertilio, Ogcocephalus 50 vetula, Balistes 48 Scarus 34 vetulus, Parophrys 47 vexillaris, Sebastodes 38 vexillarius, Holocentrus 24 vicinus, Gymnothorax 19	xaenurus, Notropis 16 xaniurus, Parmaturus 7 Xanthichthys 49 xanthostigma, Citharichthys 46 xanthulus, Cynoscion 31 xanthurus, Leiostomus 31 xantusi, Lepidopus 34 xenarcha, Mycteroperca 25 Xeneretmus 40 xenica, Adinia 21 Xenistius 31 Xenopterygii 48 Xererpes 43
ventricosus, Aptocyclus 41 venustus, Notropis 16 Verma 20 vermiculatus, Esox americanus 12 verrilli, Lycenchelys 44 verticalis, Pleuronichthys 47 vespertilio, Ogcocephalus 50 vetula, Balistes 48 Scarus 34 vetulus, Parophrys 47 vexillaris, Sebastodes 38 vexillarius, Holocentrus 24 vicinus, Gymnothorax 19 vigilax, Pimephales 16	xaenurus, Notropis 16 xaniurus, Parmaturus 7 Xanthichthys 49 xanthostigma, Citharichthys 46 xanthulus, Cynoscion 31 xanthurus, Leiostomus 31 xantusi, Lepidopus 34 xenarcha, Mycteroperca 25 Xeneretmus 40 xenica, Adinia 21 Xenistius 31 Xenopterygii 48 Xererpes 43 Xiphias 35
ventricosus, Aptocyclus 41 venustus, Notropis 16 Verma 20 vermiculatus, Esox americanus 12 verrilli, Lycenchelys 44 verticalis, Pleuronichthys 47 vespertilio, Ogcocephalus 50 vetula, Balistes 48 Scarus 34 vetulus, Parophrys 47 vexillaris, Sebastodes 38 vexillarius, Holocentrus 24 vicinus, Gymnothorax 19 vigilax, Pimephales 16 villosus, Mallotus 12	xaenurus, Notropis 16 xaniurus, Parmaturus 7 Xanthichthys 49 xanthostigma, Citharichthys 46 xanthulus, Cynoscion 31 xanthurus, Leiostomus 31 xantusi, Lepidopus 34 xenarcha, Mycteroperca 25 Xeneretmus 40 xenica, Adinia 21 Xenistius 31 Xenopterygii 48 Xererpes 43 Xiphias 35 Xiphiidae 35
ventricosus, Aptocyclus 41 venustus, Notropis 16 Verma 20 vermiculatus, Esox americanus 12 verrilli, Lycenchelys 44 verticalis, Pleuronichthys 47 vespertilio, Ogcocephalus 50 vetula, Balistes 48 Scarus 34 vetulus, Parophrys 47 vexillaris, Sebastodes 38 vexillarius, Holocentrus 24 vicinus, Gymnothorax 19 vigilax, Pimephales 16 villosus, Mallotus 12 vinculus, Radulinus 40	xaenurus, Notropis 16 xaniurus, Parmaturus 7 Xanthichthys 49 xanthostigma, Citharichthys 46 xanthulus, Cynoscion 31 xanthurus, Leiostomus 31 xantusi, Lepidopus 34 xenarcha, Mycteroperca 25 Xeneretmus 40 xenica, Adinia 21 Xenistius 31 Xenopterygii 48 Xererpes 43 Xiphias 35 Xiphiidae 35 Xiphister 44
ventricosus, Aptocyclus 41 venustus, Notropis 16 Verma 20 vermiculatus, Esox americanus 12 verrilli, Lycenchelys 44 verticalis, Pleuronichthys 47 vespertilio, Ogcocephalus 50 vetula, Balistes 48 Scarus 34 vetulus, Parophrys 47 vexillaris, Sebastodes 38 vexillarius, Holocentrus 24 vicinus, Gymnothorax 19 vigilax, Pimephales 16 villosus, Mallotus 12 vinculus, Radulinus 40 violacea, Dasyatis 9	xaenurus, Notropis 16 xaniurus, Parmaturus 7 Xanthichthys 49 xanthostigma, Citharichthys 46 xanthulus, Cynoscion 31 xanthurus, Leiostomus 31 xantusi, Lepidopus 34 xenarcha, Mycteroperca 25 Xeneretmus 40 xenica, Adinia 21 Xenistius 31 Xenopterygii 48 Xererpes 43 Xiphias 35 Xiphiidae 35 Xiphister 44 x-punctata, Hybopsis 14
ventricosus, Aptocyclus 41 venustus, Notropis 16 Verma 20 vermiculatus, Esox americanus 12 verrilli, Lycenchelys 44 verticalis, Pleuronichthys 47 vespertilio, Ogcocephalus 50 vetula, Balistes 48 Scarus 34 vetulus, Parophrys 47 vexillaris, Sebastodes 38 vexillarius, Holocentrus 24 vicinus, Gymnothorax 19 vigilax, Pimephales 16 villosus, Mallotus 12 vinculus, Radulinus 40 violacea, Dasyatis 9 violaceus, Cebidichthys 44	xaenurus, Notropis 16 xaniurus, Parmaturus 7 Xanthichthys 49 xanthostigma, Citharichthys 46 xanthulus, Cynoscion 31 xanthurus, Leiostomus 31 xantusi, Lepidopus 34 xenarcha, Mycteroperca 25 Xeneretmus 40 xenica, Adinia 21 Xenistius 31 Xenopterygii 48 Xererpes 43 Xiphias 35 Xiphiidae 35 Xiphister 44 x-punctata, Hybopsis 14 xyosterna, Stellerina 40
ventricosus, Aptocyclus 41 venustus, Notropis 16 Verma 20 vermiculatus, Esox americanus 12 verrilli, Lycenchelys 44 verrucosa, Occa 40 verticalis, Pleuronichthys 47 verspertilio, Ogcocephalus 50 vertula, Balistes 48 Scarus 34 vertulus, Parophrys 47 vertullaris, Sebastodes 38 vertullarius, Holocentrus 24 vicinus, Gymnothorax 19 vigilax, Pimephales 16 villosus, Mallotus 12 vinculus, Radulinus 40 violacea, Dasyatis 9 violaceus, Cebidichthys 44 virens, Pollachius 22	xaenurus, Notropis 16 xaniurus, Parmaturus 7 Xanthichthys 49 xanthostigma, Citharichthys 46 xanthulus, Cynoscion 31 xanthurus, Leiostomus 31 xantusi, Lepidopus 34 xenarcha, Mycteroperca 25 Xeneretmus 40 xenica, Adinia 21 Xenistius 31 Xenopterygii 48 Xererpes 43 Xiphias 35 Xiphister 44 x-punctata, Hybopsis 14 xyosterna, Stellerina 40 Xyrauchen 18
ventricosus, Aptocyclus 41 venustus, Notropis 16 Verma 20 vermiculatus, Esox americanus 12 verrilli, Lycenchelys 44 verrucosa, Occa 40 verticalis, Pleuronichthys 47 verpertilio, Ogcocephalus 50 vertula, Balistes 48 Scarus 34 vertulus, Parophrys 47 vertullaris, Sebastodes 38 vertullarius, Holocentrus 24 vicinus, Gymnothorax 19 vigilax, Pimephales 16 villosus, Mallotus 12 vinculus, Radulinus 40 violacea, Dasyatis 9 violaceus, Cebidichthys 44 virescens, Pollachius 22 virescens, Pantosteus 18	xaenurus, Notropis 16 xaniurus, Parmaturus 7 Xanthichthys 49 xanthostigma, Citharichthys 46 xanthulus, Cynoscion 31 xanthurus, Leiostomus 31 xantusi, Lepidopus 34 xenarcha, Mycteroperca 25 Xeneretmus 40 xenica, Adinia 21 Xenistius 31 Xenopterygii 48 Xererpes 43 Xiphias 35 Xiphiase 35 Xiphister 44 x-punctata, Hybopsis 14 xyosterna, Stellerina 40 Xyrauchen 18 Xyrichthys 34
ventricosus, Aptocyclus 41 venustus, Notropis 16 Verma 20 vermiculatus, Esox americanus 12 verrilli, Lycenchelys 44 verrucosa, Occa 40 verticalis, Pleuronichthys 47 verpertilio, Ogcocephalus 50 vertula, Balistes 48 Scarus 34 vertulus, Parophrys 47 vertulus, Psebastodes 38 vertularis, Sebastodes 38 vertulus, Robocentrus 24 vicinus, Gymnothorax 19 vigilax, Pimephales 16 villosus, Mallotus 12 vinculus, Radulinus 40 violacea, Dasyatis 9 violaceus, Cebidichthys 44 virescens, Pollachius 22 virescens, Pantosteus 18 virgatum, Etheostoma 28	xaenurus, Notropis 16 xaniurus, Parmaturus 7 Xanthichthys 49 xanthostigma, Citharichthys 46 xanthulus, Cynoscion 31 xanthurus, Leiostomus 31 xantusi, Lepidopus 34 xenarcha, Mycteroperca 25 Xeneretmus 40 xenica, Adinia 21 Xenistius 31 Xenopterygii 48 Xererpes 43 Xiphias 35 Xiphiidae 35 Xiphister 44 x-punctata, Hybopsis 14 xyosterna, Stellerina 40 Xyrauchen 18 Xyrichthys 34 Xystreurys 47
ventricosus, Aptocyclus 41 venustus, Notropis 16 Verma 20 vermiculatus, Esox americanus 12 verrilli, Lycenchelys 44 verrucosa, Occa 40 verticalis, Pleuronichthys 47 verspertilio, Ogcocephalus 50 vertula, Balistes 48 Scarus 34 vertulus, Parophrys 47 vertuluris, Sebastodes 38 vertularis, Sebastodes 38 vertularius, Holocentrus 24 vicinus, Gymnothorax 19 vigilax, Pimephales 16 violus, Mallotus 12 vinculus, Radulinus 40 violacea, Dasyatis 9 violaceus, Cebidichthys 44 virens, Pollachius 22 virescens, Pantosteus 18 virginicus, Anisotremus 30	xaenurus, Notropis 16 xaniurus, Parmaturus 7 Xanthichthys 49 xanthostigma, Citharichthys 46 xanthulus, Cynoscion 31 xanthurus, Leiostomus 31 xantusi, Lepidopus 34 xenarcha, Mycteroperca 25 Xeneretmus 40 xenica, Adinia 21 Xenistius 31 Xenopterygii 48 Xererpes 43 Xiphias 35 Xiphiase 35 Xiphister 44 x-punctata, Hybopsis 14 xyosterna, Stellerina 40 Xyrauchen 18 Xyrichthys 34
ventricosus, Aptocyclus 41 venustus, Notropis 16 Verma 20 vermiculatus, Esox americanus 12 verrilli, Lycenchelys 44 verricosa, Occa 40 verticalis, Pleuronichthys 47 vespertilio, Ogcocephalus 50 vetula, Balistes 48 Scarus 34 vetulus, Parophrys 47 vexillaris, Sebastodes 38 vexillarius, Holocentrus 24 vicilus, Gymnothorax 19 vigilax, Pimephales 16 villosus, Mallotus 12 vinculus, Radulinus 40 violacea, Dasyatis 9 violaceus, Cebidichthys 44 virescens, Pollachius 22 virescens, Pantosteus 18 virginicus, Anisotremus 30 Polydactylus 46	xaenurus, Notropis 16 xaniurus, Parmaturus 7 Xanthichthys 49 xanthostigma, Citharichthys 46 xanthulus, Cynoscion 31 xanthurus, Leiostomus 31 xantusi, Lepidopus 34 xenarcha, Mycteroperca 25 Xeneretmus 40 xenica, Adinia 21 Xenistius 31 Xenopterygii 48 Xiphias 35 Xiphias 35 Xiphister 44 x-punctata, Hybopsis 14 xyosterna, Stellerina 40 Xyrauchen 18 Xyrichthys 34 Xystreurys 47
ventricosus, Aptocyclus 41 venustus, Notropis 16 Verma 20 vermiculatus, Esox americanus 12 verrilli, Lycenchelys 44 verrucosa, Occa 40 verticalis, Pleuronichthys 47 verspertilio, Ogcocephalus 50 vertula, Balistes 48 Scarus 34 vertulus, Parophrys 47 vertuluris, Sebastodes 38 vertularis, Sebastodes 38 vertularius, Holocentrus 24 vicinus, Gymnothorax 19 vigilax, Pimephales 16 violus, Mallotus 12 vinculus, Radulinus 40 violacea, Dasyatis 9 violaceus, Cebidichthys 44 virens, Pollachius 22 virescens, Pantosteus 18 virginicus, Anisotremus 30	xaenurus, Notropis 16 xaniurus, Parmaturus 7 Xanthichthys 49 xanthostigma, Citharichthys 46 xanthulus, Cynoscion 31 xanthurus, Leiostomus 31 xantusi, Lepidopus 34 xenarcha, Mycteroperca 25 Xeneretmus 40 xenica, Adinia 21 Xenistius 31 Xenopterygii 48 Xererpes 43 Xiphias 35 Xiphiidae 35 Xiphister 44 x-punctata, Hybopsis 14 xyosterna, Stellerina 40 Xyrauchen 18 Xyrichthys 34 Xystreurys 47

y-graecum, A stroscopus	42	zenithicus, Coregonus	11
yoshiae, Anarchias		Zenopsis	
,		Zeomorphi	
Z		Zoarcidae	
zacentrus, Sebastodes	38	zonale, Etheostoma	28
zachirus, Glyptocephalus		zonata, Seriola	30
Zalembius		zonatum, Elassoma	27
Zalieutes		zonatus, Chaetodipterus	32
Zaniolepidae		Notropis	16
Zaniolepis		zonifer, Erilepis	38
Zaprora		zoniferum, Etheostoma	29
Zaproridae		zonistius, Notropis	16
Zapteryx	_	zonope, Jordania	39
zebra, Lythrypnus		zophochir, Ophichthus	
zebrinus, Fundulus		zosterae, Hippocampus	
Zeidae		zygaena, Sphyrna	
Zeiformes	~ .	zuopterus, Galeorhinus	



